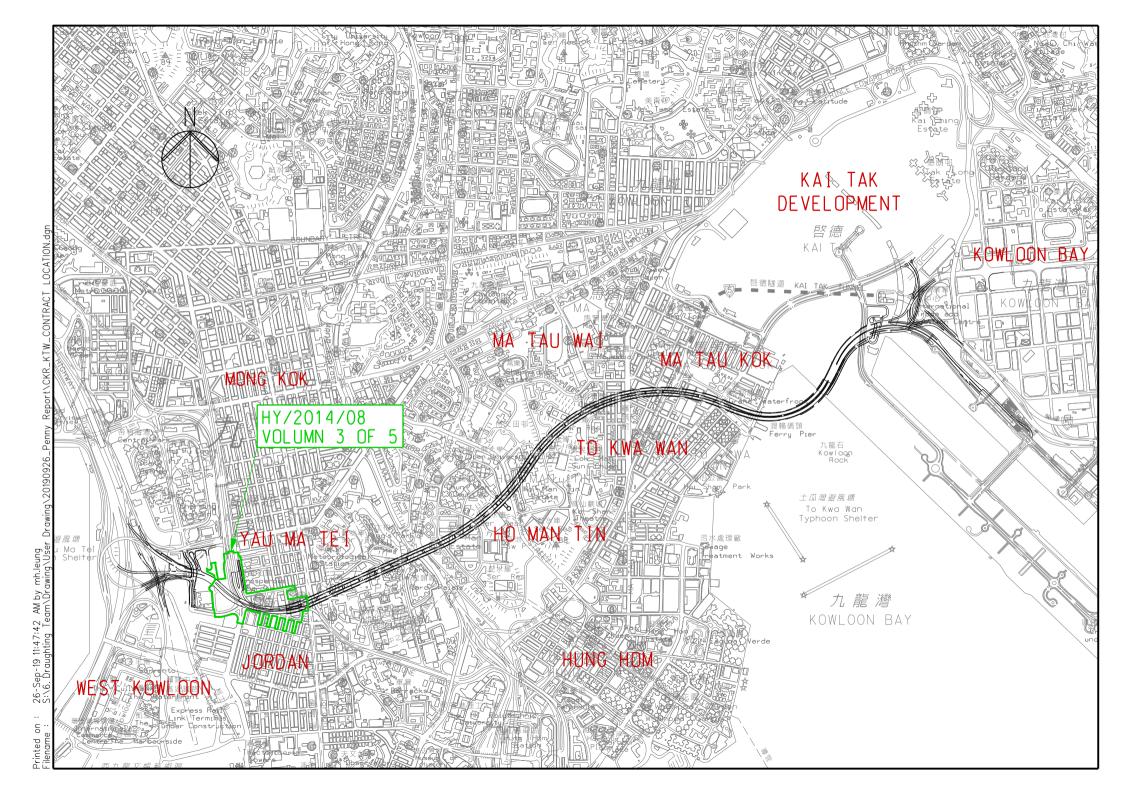
Vol. 3 of 5 FEP-03/457/2013/D Central Kowloon Route Yau Ma Tei East Contract No. HY/2014/08 June 2024







Environmental Permit No. EP-457/2013/D

Central Kowloon Route

Independent Environmental Checker Verification

Reference Document/Plan	
Document/ Plan to be Certified / Verified:	Monthly EM&A Report No.75 (June 2024)
Date of Report:	8 July 2024
Date received by IEC:	8 July 2024

Yau Ma Tei East (HY/2014/08)

Reference EP Condition

Works Contract:

Environmental Permit Condition: 3.4

Submission of Monthly EM&A Report of the Project

3.4 Four hard copies and one electronic copy of monthly EM&A Report shall be submitted to the Director within 2 weeks after the end of each reporting month throughout the entire construction period. The EM&A Reports shall include a summary of all non-compliance. The submissions shall be certified by the ET Leader and verified by the IEC as complying with the requirements as set out in the EM&A Manual before submission to the Director. Additional copies of the submission shall be provided to the Director upon request by the Director.

IEC Verification

I hereby verify that the above referenced document/plan complies with the above referenced condition of EP-457/2013/D.

Mondy 20.

Ms Mandy To Date: 8 July 2024

Independent Environmental Checker

Our ref: 0436942_IEC Verification Cert_YMTE_Monthly EM&A Rpt No.75.docx





Build King – SK ecoplant Joint Venture

Central Kowloon Route Contract HY/2014/08 Section of Yau Ma Tei East

Monthly EM&A Report No. 75

(Period from 1 to 30 June 2024)

Rev. 1

(8 July 2024)

	Name	Signature
Prepared by	Kako H.L. Ho (Assistant Environmental Consultant)	Ho
Checked & Reviewed by	Y.H. Law (Senior Environmental Consultant)	Malan
Approved & Certified by	Kevin W. M. Li (Environmental Team Leader)	K

TABLE OF CONTENTS

EXECUTIVE SUMMARY

1.	BASIC PROJECT INFORMATION	6
2.	ENVIRONMENTAL STATUS	9
3.	MONITORING RESULTS	1 1
4.	SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS	19
5.	EM&A SITE INSPECTION	21
6.	FUTURE KEY ISSUES	22
7.	CONCLUSION AND RECOMMENDATIONS	23

LIST OF APPENDICES

- A. Alignment and Works Area for the Contract No. HY/2014/08
- B. Construction Programme
- C. Project Organization Chart
- D. Dust Event-Action Plan (EAP)
- E. Noise Event-Action Plan (EAP)
- F. Environmental Mitigation Implementation Schedule (EMIS)
- G. Monitoring Schedules of the Reporting Month
- H. Calibration Certificate (Air Monitoring)
- I. Calibration Certificate (Noise)
- J. The Certification of Laboratory with HOKLAS Accredited Analytical Tests
- K. Location Plan of Noise and Air Quality Monitoring Station
- L. Monitoring Data (Air Monitoring)
- M. Monitoring Data (Noise)
- N. Waste Flow Table
- O. Statistics on Complaint, Notifications of Summons and Successful Prosecutions
- P. Monitoring Schedule of the Coming Month
- Q. Interim Report for the Complaint

EXECUTIVE SUMMARY

- A.1 Build King SK ecoplant Joint Venture ("Contractor") commenced the construction works of Highway Department (HyD) Central Kowloon Route Contract No. HY/2014/08 Section of Yau Ma Tei East ("The Project") on 20 April 2018. This is the 75th monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the period from 1 June 2024 to 30 June 2024.
- A.2 A summary of the construction works reported by Main Contractor for the Project during the reporting month is listed below.

Construction Activities undertaken

- Excavation and Lateral Support works/Excavation, Construct Roof Slab Ceiling Slab & Bottom Slab at Zone B-EB1/WB1
- Excavation and Lateral Support works/Excavation, Install Hanger Supports, Construct Roof Slab, Ceiling Slab and Bottom Slab for Zone B3 & F
- Excavation and Lateral Support works/Excavation, Install Hanger Supports, Construct Roof Slab, Ceiling Slab, Underpinning Wall and Bottom Slab for Zone G1 & G2
- Construct W/B Right-line Gascoigne Road Flyover Deck at P4R, P6R & P7R
- Demolish Remaining Existing Gascoigne Road Flyover Footings
- Construct Socketed H-piles, Pile Caps, Ground Beams, Reinforced Concrete Columns, Steel Posts, Steel Main Beams, Steel Tie Beams and Acoustic Panels for Noise Enclosure at Noise Enclosure at Zone 3
- Pipe Piles, Barrette, Caps/Footings, Steel Columns, Girder Beams, Steel Posts, Steel Main Beams, Steel Tie Beams, Acoustic Panels and Smoke Van. Panels for Noise Enclosure at Zone 2
- A.3 A summary of regular construction noise and construction dust monitoring activities in this reporting period is listed below:

Regular construction noise monitoring during normal working hours

W-N1A, W-P11, W-N18, W-N25A 5 times

Construction dust (24-hour TSP) monitoring

W-A1 6 times W-A6 5 times

Construction dust (1-hour TSP) monitoring

W-A1, W-A6 15 times

- A.4 Bi-weekly inspection of the implementation of landscape and visual mitigation measures was conducted on 6 and 20 June 2024. Details of the audit findings and implementation status are presented in Section 5.
- A.5 Joint weekly site inspections were conducted by representatives of the Environmental Team (ET), Contractor and Engineer on 6, 13, 20 and 27 June 2024. One joint site inspection with IEC was also undertaken on 20 June 2024. Details of the audit findings and implementation status are presented in Section 5.
- A.6 Details of waste management are presented in Section 3.

- A.7 Two Action Level of construction noise were triggered during the reporting month as documented complaints were received. No exceedance of Limit Level of construction noise was recorded in the reporting month. No exceedance of the Action and Limit Level of 24-hour TSP and 1-hour TSP was recorded in the reporting month.
- A.8 A total of two environmental complaints were received in the reporting month. After investigation with Contractor, precautionary measures had been proposed to the Contractor by ET. The interim reports for the complaints are shown in Appendix Q.
- A.9 No non-compliance was reported in the reporting month.
- A.10 No notification of summon or prosecution was received in this reporting month.
- A.11 A summary of the construction activities provided by Main Contractor in the next reporting month is listed below:

Construction Activities to be undertaken

- Complete closing the temporary openings, remove ELS, remove ELS L1 & L2 and complete remaining road works at Zone A westbound
- Complete closing the openings and road works at Zone EB2/C1/C2/C3/D2/D3
- Excavation and install ELS below ceiling slab at Zone WB1 westbound
- Excavation down to ceiling slab, erect steel tower frame for underpinning works for existing pier C1/A1 at Zone B3 westbound
- Complete install hanger supports for CLP Cable Tunnel A, excavation and install ELS down to roof slab at Zone F
- Excavation down to roof slab and construct roof slab at Zone G1
- Excavate and install ELS from L5 to L7 at Zone G2
- Bridge Works:
 - i.Complete remaining deck construction (segments 10) and cast key segment at P4R
 - ii.FT2 installation at downhill side and deck construction for P6R
 - iii.End span construction including remedial works of recessing the MJ on existing GRF for P7R
- Continue erection of secondary tie beams and acoustic panels for Noise Enclosure F02 in Zone 3 (night works). Continue trial pit excavation and DN300 gas main diversion by HKCG along Ching Ping Street for C07
- Works at Zone 2 Noise Enclosure are the following:
 - i.Column A Complete Column Erection
 - ii.Column E Column Erection
 - iii.Column G Pending approval of TTA scheme for column erection
 - iv.Column C Pending access from tunnel construction for RC plinth construction
 - v.Column D Pending access for RC plinth construction
 - vi.Column H RC plinth construction
- Noise Enclosure steelworks fabrication at the Fabrication Yards in Zhuhai, China
- Construct boundary wall (retaining wall) at Rest Garden Monitoring of instrumentation for all areas
- Commence backfilling and reinstatement works at Zone B & C with site clearance, applying water proofing on top of roof slab and removal of ELS L3
- Monitoring of instrumentation for all areas

1. BASIC PROJECT INFORMATION

- 1.1. Central Kowloon Route (CKR) is a 4.7 km long dual 3-lane trunk road in Central Kowloon linking Yau Ma Tei Interchange in West Kowloon with the road network on Kai Tak Development and Kowloon Bay in East Kowloon.
- 1.2. The Central Kowloon Route Design and Construction Environmental Impact Assessment Report (Register No.: AEIAR-171/2013) was approved with conditions by the Environmental Protection Department (EPD) on 11 July 2013. An Environmental Permit (EP 457/2013) was issued on 9 August 2013. Variations of EP (VEP) was applied for and the EP (EP-457/2013/C) was issued by EPD on 16 January 2017. Variations of EP (VEP) was subsequently applied for and the latest EP (EP-457/2013/D) was issued by EPD on 15 June 2021. A Further EP (FEP-03/457/2013/D) was issued by EPD on 5 November 2021.
- 1.3. The construction of the CKR had been divided into different sections. This Contract No. HY/2014/08 Section of Yau Ma Tei East (YMTE) covers part of the construction activities located at Yau Ma Tei under the EP and FEP which includes:
 - · Section of Yau Ma Tei East
 - i. Construction of Cut-and-Cover Tunnel in compliance with all statutory requirements and the requirements specified under the Contract while maintaining the traffic with all necessary provisions
 - ii. Construction and subsequent handover of Yau Ma Tei Access Shaft for facilitating the access and use by the contractor of Central Kowloon Route Central Tunnel contract
 - iii. Demolition of existing buildings including Yau Ma Tei Multi-storey Carpark Building, Yau Ma Tei Specialist Clinic Extension Building and Yau Ma Tei Jade Hawker Bazaars
 - iv. Demolition and re-provisioning of Gascoigne Road Flyover and the underpinning works for the existing Ferry Street Flyover and Yau Ma Tei Police Station New Wing Building
 - v. Construction of civil provisions and coordination with the contractor of Central Kowloon Route Tunnel Electrical & Mechanical contract
 - vi. Design and construction of Noise Barrier Works
 - vii. Prepare temporary traffic arrangement proposals, discuss at Traffic Management Liaison Group meeting and obtain its agreement and approval/endorsement from relevant authorities at suitable times to enable the execution of the Works

The alignment and works area for the Contract No. HY/2014/08 - are shown in Appendix A.

1.4. A summary of the major construction activities undertaken in this reporting period is shown in Table 1.1. The construction programme is presented in Appendix B.

Table 1.1 Summary of the Construction Activities reported by Main Contractor during the Reporting Month

Construction Activities undertaken

- Excavation and Lateral Support works/Excavation, Construct Roof Slab Ceiling Slab & Bottom Slab at Zone B-EB1/WB1
- Excavation and Lateral Support works/Excavation, Install Hanger Supports, Construct Roof Slab, Ceiling Slab and Bottom Slab for Zone B3 & F
- Excavation and Lateral Support works/Excavation, Install Hanger Supports, Construct Roof Slab, Ceiling Slab, Underpinning Wall and Bottom Slab for Zone G1 & G2
- Construct W/B Right-line Gascoigne Road Flyover Deck at P4R, P6R & P7R
- Demolish Remaining Existing Gascoigne Road Flyover Footings
- Construct Socketed H-piles, Pile Caps, Ground Beams, Reinforced Concrete Columns, Steel Posts, Steel Main Beams, Steel Tie Beams and Acoustic Panels for Noise Enclosure at Noise Enclosure at Zone 3
- Pipe Piles, Barrette, Caps/Footings, Steel Columns, Girder Beams, Steel Posts, Steel Main Beams, Steel Tie Beams, Acoustic Panels and Smoke Van. Panels for Noise Enclosure at Zone 2
 - 1.5. The project organisational chart specifying management structure and contact details are shown in Appendix C.
 - 1.6. A summary of the valid permits, licences, and /or notifications on environmental protection for this Project is presented in Table 1.2.

Table 1.2 Summary of the Status of Valid Environmental Licence

Notification, Permit and Documentations

Notification, 1 errint and Documentations					
Permit/ Licences/	Valid	Period		Remark	
Notification /Reference No.	From	То	Status		
Environmental Permit		•	1		
EP-457/2013/D	15 Jun 2021	End of Project	Valid	-	
Further Environmental 1	Permit				
FEP-03/457/2013/D	5 Nov 2021	End of Project	Valid		
Wastewater Discharge Li	cense				
WT00043433-2023	17 Mar 2023	31 Mar 2028	Valid	-	
Notification of Constructi	on Works under	the Air Pollution	n Control (Constru	ection Dust) Regulation	
471691	14 Sep 2021	End of Project	Notified	-	
Chemical Waste Produce	r Registration				
WPN5213-225-B2526-01	14 Mar 2018	End of Project	Valid	-	
Billing Account for Dispo	sal of Constructi	on Waste			
7029997	1 Feb 2018	End of Project	Valid	-	
Construction Noise Permi	it				
GW-RE0356-24	28 Mar 2024	27 Jun 2024	Superseded by GW-RE0723-24	Construction Noise Permit at Zone D & G	
GW-RE0723-24	28 Jun 2024	27 Sep 2024	Valid	at Zone D & G	
GW-RE0050-24	27 Jan 2024	26 Jul 2024	Valid	Construction Noise Permit for Bridge Works at Shanghai Street	
GW-RE0373-24	5 Apr 2024	4 Oct 2024	Valid	Construction Noise Permit at Zone A & B1	

Permit/ Licences/	/ Valid Period				
Notification /Reference No.	From	То	Status	Remark	
GW-RE0454-24	19 Apr 2024	18 Jul 2024	Superseded by GW-RE0555-24	Construction Noise Permit at Zone B1 – B3 & C	
GW-RE0555-24	6 May 2024	2 Nov 2024	Valid	Construction Noise Permit at Zone B1-B3, C & F	
GW-RE0279-24	9 Mar 2024	6 Sep 2024	Valid	Construction Noise Permit at P6	
GW-RE0370-24	2 Apr 2024	28 Jun 2024	Superseded by GW-RE0624-24	Construction Noise Permit for Erection of work platform at Zone 3	
GW-RE0624-24	23 May 2024	31 Jul 2024	Valid	Construction Noise Permit for Erection of Enclosure at Zone 3	
GW-RE0489-24	29 Apr 2024	18 Oct 2024	Valid	Construction Noise Permit for Welding at Column E	
GW-RE0556-24	8 May 2024	30 Jun 2024	Expired during reporting month	Construction Noise Permit for Column Erection at Column E	
GW-RE0611-24	24 May 2024	29 Jun 2024	Expired during reporting month	Construction Noise Permit for Erection of Formtraveller at Reclamation Street	
GW-RE0656-24	5 Jun 2024	31 Aug 2024	Valid	Construction Noise Permit for Column Erection at Column G	
GW-RE0696-24	14 Jun 2024	31 Jul 2024	Valid	Construction Noise Permit for Erection of Enclosure at Zone 3	
Marine Dumping Permit			T		
EP/MD/24-084	1 Apr 2024	30 Jun 2024	Superseded by EP/MD/25-007	Type 1 – Open Sea Disposal (Mud Pit CMP	
EP/MD/25-007	1 Jun 2024	31 Aug 2024	Valid	Vd)	
EP/MD/24-085	1 Apr 2024	30 Jun 2024	Valid	Type 1 – Open Sea Disposal (South Cheung Chau)	
EP/MD/24-086	1 Apr 2024	30 Jun 2024	Superseded by EP/MD/25-006	Type 1 – Open Sea Disposal (Dedicated Site)	
EP/MD/25-006	1 Jun 2024	31 Aug 2024	Valid	& Type 2 - Confined Marine Disposal	

2. ENVIRONMENTAL STATUS

2.1. Environmental permit (EP) conditions under the EIAO, submission status under the EP and implementation status of mitigation measures had been reviewed and implemented on schedule. The status of required submissions under the EP (EP-457/2013/D) and FEP (FEP-03/457/2013/D) as of the reporting period for the Project are summarised in Table 2.1

Table 2.1 Summary of Status of Required Submission for EP-457/2013/D and FEP-03/457/2013/D for the Project

EP/FEP Condition (EP-457/2013/D) (FEP-03/457/2013/D)	Submission	Submission date
Condition 3.4	Monthly EM&A Report (May 2024)	13 June 2024

2.2. Details of the major construction activities reported by Main Contractor in this reporting period are shown in Table 2.2.

Table 2.2 Summary of the Construction Activities reported by Main Contractor during the Reporting Month

Co	nstruction activities undertaken	Re	marks on progress
•	Excavation and Lateral Support works/Excavation, Construct Roof Slab Ceiling Slab & Bottom Slab at Zone B-EB1/WB1	•	73% completion
•	Excavation and Lateral Support works/Excavation, Install Hanger Supports, Construct Roof Slab, Ceiling Slab and Bottom Slab for Zone B3 & F	•	40% completion
•	Excavation and Lateral Support works /Excavation, Install Hanger Supports, Construct Roof Slab, Ceiling Slab, Underpinning Wall and Bottom Slab for Zone G1 & G2	•	38% completion
•	Construct W/B Right-line Gascoigne Road Flyover Deck at P4R, P6R & P7R	•	70% completion
•	Demolish Remaining Existing Gascoigne Road Flyover Footings	•	90% completion
•	Construct Socketed H-piles, Pile Caps, Ground Beams, Reinforced Concrete Columns, Steel Posts, Steel Main Beams, Steel Tie Beams and Acoustic Panels for Noise Enclosure at Noise Enclosure at Zone 3	•	75% completion
•	Pipe Piles, Barrette, Caps/Footings, Steel Columns, Girder Beams, Steel Posts, Steel Main Beams, Steel Tie Beams, Acoustic Panels and Smoke Van. Panels for Noise Enclosure at Zone 2	•	23% completion

2.3. The drawing showing the project layout and the location of the monitoring station and environmental sensitive receivers are attached in Appendix A and Appendix K. Co-ordinates of the monitoring location are shown in Table 2.3.

Table 2.3 Summary for the location of the monitoring station

Monitoring Location	Location ID	Latitude	Longitude
Yau Ma Tei Catholic Primary School (Hoi Wang Road)*	W-A1/ W-N1A	22.31345	114.16409
Man Cheong Building	W-A6	22.308185	114.166033
Hydan Place	W-N18	22.30858	114.170185
Prosperous Garden Block 1	W-N25A	22.309846	114.168072
The Coronation Tower 1	W-P11	22.309824	114.165616

Remark: *The High Volume Sampler (HVS) at dust impact monitoring location W-A1 had been relocated on 6 Sep 2022 due to installation work of PV panel at Yau Ma Tei Catholic Primary School. The relocation of HVS was approved by ER and agreed with IEC.

3. MONITORING RESULTS

3.1. Monitoring Parameters

Air Quality

- 3.1.1. The impact monitoring had been carried out in accordance with section 5.8 of the approved EM&A Manual to determine the 1-hour and 24-hour total suspended particulates (TSP) levels at the monitoring locations in the reporting month.
- 3.1.2. The sampling frequency of at least once in every 6 days, shall be strictly observed at the monitoring stations for 24-hour TSP monitoring. For 1-hour TSP monitoring, the sampling frequency of at least 3 times in every 6 days should be undertaken when the highest dust impact occurs.
- 3.1.3. General meteorological conditions (wind speed, direction and precipitation) and notes regarding any significant adjacent dust producing sources had also been recorded throughout the impact monitoring period.

Noise

- 3.1.4. Construction noise level shall be measured in terms of the A-weighted equivalent continuous sound pressure level (L_{eq}). Leq (30min) shall be used as the monitoring parameter for the time period between 0700 and 1900 hours on normal weekdays.
- 3.1.5. For all other time periods, Leq (5min) shall be employed for comparison with the Noise Control Ordinance (NCO) criteria.
- 3.1.6. As supplementary information for data auditing, statistical results such as L_{10} and L_{90} shall also be obtained for reference.
- 3.2. Monitoring Equipment

Air Quality

- 3.2.1. 1-hour TSP levels and 24-hour TSP had been measured with direct reading dust meter and High Volume Samplers respectively. It has been demonstrated its capability in achieving comparable results with high volume sampling method as set out in the Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50).
- 3.2.2. The 1-hour TSP meter was calibrated by the manufacturer prior to purchasing. Zero response of the instrument was checked before and after each monitoring event. Operation of the 1-hour TSP meter followed manufacturer's Operation and Service Manual. The 24-hour TSP meter was calibrated against firmware 80570-8100-V1.0.4, annually. Operation of the 24-hour TSP meter followed manufacturer's Operation and Service Manual. Valid calibration certificates of dust monitoring equipment are attached in Appendix H.
- 3.2.3. A summary of the equipment that was deployed for the 24- hour averaged monitoring is shown in Table 3.1. The TSP monitoring was conducted as per the schedule presented in Appendix G.

3.2.4. The equipment used for 1-hour TSP and 24-hour TSP measurement and calibration are summarised in Table 3.1

Monitoring Parameter	Monitoring Equipment	Serial Number	Date of Calibration
	LD-5R Digital Dust Indicator	761172	28 Nov 2023
1-hour TSP	LD-5R Digital Dust Indicator	992821	28 Nov 2023
1-110ul 13F	PC-3A(E) Digital Dust Indicator	JC-2002222	19 Mar 2024
	PC-3A(E) Digital Dust Indicator	JC-2002225	19 Mar 2024
	TE-5170X High Volume	1084	31 May 2024 and
	Sampler		13 Jun 2024
24-hour TSP	TE-5170X High Volume	1050	31 May 2024 and
	Sampler		13 Jun 2024
	TE-5025A Calibration Kit	3465	15 Jan 2024

Table 3.1 Construction Dust Monitoring Equipment

Noise

- 3.2.5. Sound level meter in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications has been used for carrying out the noise monitoring. The sound level meter has been checked using an acoustic calibrator. The wind speed and other metrological data has been recorded from Hong Kong Observatory- King's Park meteorological station, along with portable wind speed meter stand by as back up when the information are not available from HKO.
- 3.2.6. Acoustic calibrators and sound level meters using for the monitoring is within the valid period and were calibrated per year. Valid calibration certificate of noise monitoring equipment is attached in Appendix I.
- 3.2.7. The details of equipment using for monitoring are listed in Table 3.2, as below:

Monitoring Equipment	Serial Number	Date of Calibration
Nti XL2 Sound Level Meter	A2A-09696-E0	2 Mar 2024
Rion NC-75 Sound Level Calibrator	34724244	3 Aug 2023

Table 3.2 Monitoring Equipment Used in Monitoring

3.3. Monitoring Methodology and QA/QC results

Air Quality

- 3.3.1. The 1-hour TSP monitor, portable dust meters (Sibata Digital Dust Indicator Model LD-5R and PC-3A(E) digital dust indicator) were used for the impact monitoring. The 1-hour TSP meters provides a real time 1-hour TSP measurement based on 90° light scattering. Three 1-hour TSP level were logged per every six days.
- 3.3.2. The 24-hour TSP monitor, High Volume Samplers (Tisch TE-5170X High Volume Air Sampler) were used for the impact monitoring. The 24-hour TSP monitoring consists of the following:

- ◆ The HVS was set at the monitoring location, with electricity supply connected and secured:
- ♦ HVS was calibrated before commencing the 1st measurement;
- ◆ The filter paper was weight and provided by HOKLAS lab (Acumen Laboratory and Testing Limited and ALS Technichem (HK) Pty Ltd) before and after the sampling. Certificate of HOKLAS accredited laboratory can be referred to Appendix J;
- ◆ The airflow over time during sampling process was recorded by the HVS.

3.3.3. HVSs were free-standing with no obstruction. The following criteria were considered in the installation of the HVS:

- ◆ Appropriate support to secure the samples against gusty wind needed to be provided the monitoring station;
- ◆ A minimum of 2m separation from walls, parapets and penthouses was required for rooftop samplers;
- ◆ No furnace or incinerator flues was nearby;
- ◆ Airflow around the sampler was unrestricted; and
- Permission could be obtained to set up the samplers and gain access to the monitoring station.

3.3.4. Preparation of Filter Papers

- Glass fiber filters were labelled and sufficient filters that were clean and without pinholes were selected;
- ◆ All filters were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25°C and not varied by more than ±3°C; the relative humidity (RH)was 40%; and
- ◆ Acumen Laboratory and Testing Limited and ALS Technichem (HK) Pty Limited, as HOKLAS accredited laboratory, implemented comprehensive quality assurance and quality control programmes on the filters.

3.3.5. Field Monitoring

- The power supply was checked to ensure that the HVS was working properly;
- ◆ The filter holder and area surrounding the filter were cleaned:
- ◆ The filter holder was removed by loosening the foul bolts and a new filter, with stamped number upward, on a supporting screen was aligned carefully;
- ◆ The filter was properly aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter;
- ◆ The swing bolts were fastened to hold the filter holder down to the frame. The pressure applied should be sufficient to avoid air leakage at the edges;
- ◆ The shelter lid was closed and secured with an aluminum strip;
- ◆ The HVS was warmed- up for about 5 minutes to establish run- temperature conditions;
- A new flow rate record sheet was inserted into the flow recorder;
- ◆ The flow rates of the HVS was checked and adjusted to between 0.64-1.52m³min⁻¹, which was within the range specified in the EM&A Manual (i.e. 0.6-1.7m³min⁻¹);

- ◆ The programmable timer was set for a sampling period of 24 hours, and the starting time, weather condition and filter number were recorded;
- ◆ The initial elapsed time was recorded;
- ◆ At the end of sampling, the sampled filter was removed carefully and folded in half so that only surfaces with collected particulate matter were in contact;
- ◆ The filter paper was placed in a clean plastic envelope and sealed; all monitoring information was recorded on a standard data sheet and
- ◆ The filters were sent to (Acumen Laboratory and Testing Ltd and ALS Technichem (HK) Pty Ltd) for analysis.

3.3.6. Maintenance and Calibration

- ◆ The HVS and their accessories were maintained in a good working condition. For example, motor brushes were replaced routinely and electrical wiring was checked to ensure a continuous power supply; and
- ◆ The flow rate of each HVS with mass flow controller was calibrated using an orifice calibrator, Initial calibrations of the dust monitoring equipment were conducted upon installation and prior to commissioning. Five- point calibration was carried out for HVS using TE-5025 Calibration Kit. HVS is calibrated bimonthly. The calibration records for the HVS is given in Appendix H.

3.3.7. Wind Data Monitoring

◆ The wind speed has been recorded from Hong Kong Observatory- King's Park meteorological station, along with portable wind speed meter stand by as back up when the information are not available from HKO.

Noise

- 3.3.8. All noise measurements by the meter were set to FAST response and on the A-weighted equivalent continuous sound pressure level (L_{eq}) in decibels dB(A). $L_{Aeq(30min)}$ was used as the monitoring metric for the time period between 0700 -1900 hours on normal weekdays. The measured noise levels were logged every 5 minutes throughout the monitoring period.
- 3.3.9. Prior to the noise measurement, the accuracy of the sound level meter was checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Checking was conducted before and after the monitoring. The calibration level before and after the noise measurement is agreed to within 1.0 dB(A).
- 3.3.10. Noise measurements should not be made in presence of fog, rain, wind with a steady speed exceeding 5 ms⁻¹ or wind with gusts exceeding 10 ms⁻¹. The wind speed was checked with a portable wind speed meter capable of measuring with speeds in ms⁻¹.

3.4. Monitoring Locations

Air Quality

3.4.1. During the site visit, both of the original proposed dust monitoring locations were rejected due to the condition at The Coronation was not favourable for monitoring and the access was declined by the management office of Hong Kong Community College (HKCC) of PolyU. Two alternative air monitoring stations Yau Ma Tei Catholic Primary School (Hoi Wang Road) and Man Cheong Building had been proposed by ET and approved by IEC. 2 designated air monitoring locations were identified and agreed with IEC and EPD. Details of air monitoring stations are described in Table 3.3. The location plan of air quality monitoring stations is shown in Appendix K.

Table 3.3 Location of the Dust Monitoring Stations

Air Quality Monitoring Station	Dust Monitoring Station
W-A1	Yau Ma Tei Catholic Primary School (Hoi Wang Road)
W-A6	Man Cheong Building

Noise

3.4.2. During the site visit, one of the original proposed noise monitoring locations Tak Cheong Building was rejected by the president of the owner's corporation. Alternative noise monitoring station Hydan place had been proposed by ET and approved by IEC. 4 noise sensitive receivers designated noise monitoring locations were identified and agreed with IEC and EPD. The designated monitoring stations are identified and access was granted by the premises. The details of noise monitoring stations are described in Table 3.4 and the location plan of noise monitoring station is shown in Appendix K.

Table 3.4 Noise Monitoring Stations

Noise Monitoring Station	Identified Noise Monitoring Station	Type of Measurement
W-N1A	Yau Ma Tei Catholic Primary School (Hoi Wang Road)	Façade
W-N18	Hydan Place	Façade
W-N25A	Prosperous Garden Block 1	Façade
W-P11	The Coronation Tower 1	Façade

- 3.5. Monitoring date, time, frequency and duration
- 3.5.1. A summary of impact monitoring duration, sampling parameter and frequency is presented in Table 3.5.

Impact Duration **Sampling Parameter** Frequency **Monitoring** 1-hour continuous 1-hour TSP Dust 3 times per six days measurement 24-hour continuous Dust 24-hour TSP Once per six days sampling 30-minute continuous $L_{eq 30 min}$, Noise Once per week (0700 - 1900)measurement L_{10} and L_{90} as reference.

Table 3.5 Summary of Impact Monitoring Programme

3.6. Result Summary

Air Quality

3.6.1. According to our field observations, the major dust source identified at the designated air quality monitoring stations in the reporting month are summarised in Table 3.6.

Table 3.6 Observation at Dust Monitoring Stations

Monitoring Station	Major Dust Source
W-A1	Nearby traffic
W-A6	Nearby traffic

- 3.6.2. Air quality impact monitoring for the reporting month was carried out on 4, 8, 14, 20 and 26 June 2024. Due to equipment malfunction, the 24-hour air quality impact monitoring at W-A1 on 29/05/2024 has been rescheduled to 01/06/2024. The 24-hour TSP monitoring result at W-A1 on 01/06/2024 has been provided in this monthly report.
- 3.6.3. The results for 1-hour TSP and 24-hour TSP are summarized in Table 3.7 and Table 3.8. The measurement data and details of influencing factors such as weather conditions and site observation are presented in Appendix L.

Table 3.7 Summary of 1-hour TSP Monitoring Results

Monitoring Location	Range(μg/m ³)	Action Level(µg/m3)	Limit Level(µg/m3)
W-A1	44 - 58	319	500
W-A6	42 - 56	306	500

Table 3.8 Summary of 24-hour TSP Monitoring Results

Monitoring Location	Range(µg/m ³)	Action Level(μg/m3)	Limit Level(µg/m3)
W-A1	34 – 64	167	260
W-A6	31 – 55	166	260

Noise

3.6.4. According to our field observations, the major noise source identified at the designated noise monitoring station in the reporting month are summarised in Table 3.9:

Monitoring Station	Major Noise Source
W-N1A	Nearby traffic
W-N18	Nearby traffic
W-N25A	Nearby traffic
W-P11	Nearby traffic

Table 3.9 Observation at Noise Monitoring Stations

- 3.6.5. The construction noise impact monitoring for the reporting month was carried out on 4, 8, 14, 20 and 26 June 2024.
- 3.6.6. The result for noise monitoring is summarized in Table 3.10. The measurement data are shown in Appendix M.

Monitoring Time Range, dB(A) Parameter Period location **Action Level** Limit Level# $\mathbf{L}_{\mathbf{eq}}$ L_{10} L_{90} 70dB(A) or 65 W-N1A* 64.5 - 65.070.7 - 71.458.7 - 60.0dB(A) during examination W-N18 68.4 - 69.572.6 - 73.559.4 - 60.3Normal When one documented working Leq hour from 30min complaint is 0700-1900 received W-N25A 68.0 - 69.072.5 - 72.762.6 - 63.475dB(A)# W-P11 64.6 - 65.468.6 - 68.962.1 - 62.6

Table 3.10 Summary of Noise Monitoring Results

Remarks:

- 1. # If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit by the Noise Control Authority have to be followed.
- 2. *Examination was scheduled at Yau Ma Tei Catholic Primary School from 5 June 2024 to 13 June 2024. The limit level of W-N1A would be 65 dB(A) on 8 June 2024.

Waste management

3.6.7. The waste generated from this Project includes inert C&D materials, and non-inert C&D materials. Non-inert C&D materials are made up of general refuse, vegetative wastes and recyclable wastes such as plastics and paper/cardboard packaging waste. Steel materials generated from the project are also grouped into non-inert C&D materials as the materials were not disposed of with other inert C&D materials. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting month are summarised in Table 3.11. Details of cumulative waste management data are presented as a waste flow table in Appendix N.

Table 3.11 Quantities of waste generated from the Project

			(Quantity		
			Non-inert C&D Materials			
		Others, e.g.	Recy	ycled material	s	
Reporting period	Inert C&D Materials (in 'tonnes)	Chemical Waste (in'000 Kg)	General Refuse disposed at Landfill (in 'tonnes)	Paper/card board (in '000 Kg)		Metals (in '000 Kg)
June 2024	21117.50	0.00	162.10	0.50	0.01	0.00

4. SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTIONS

4.1. The Environmental Complaint Handling Procedure is shown in below Table 4.1:

Table 4.1 Environmental Complaint Handling Procedure

ER notify Contractor, ET and IEC
to the complaint database. Contractor, ER and ET to gation of complaint
If complaint is found valid
Contractor to identify and implement remedial measures in consultation with the IEC, ET and ER.
The ER, ET and IEC to review the effectiveness of the Contractor's remedial measures and the updated situation; ET to undertake additional monitoring and audit to verify the situation if necessary, and oversee that circumstances leading to the complaint do not recur. ER to conduct further inspection as necessary.
ntractor to prepare interim report on the status of the tipulated above, including the details of the remedial or already taken, for submission to EPD within the signed by the EPD

The ET to record the details of the complaint, results of the investigation, subsequent actions taken to address the complaint and updated situation including the effectiveness of the remedial measures, supported by regular and additional monitoring results in the monthly EM&A reports

- 4.2. Should non-compliance of the criteria occur, action in accordance with the Event and Action Plan in Appendix D and Appendix E shall be carried out.
- 4.3. Two Action Level of construction noise were triggered during the reporting month as documented complaints were received. No exceedance of Limit Level of construction noise was recorded in the reporting month. No exceedance of the Action and Limit Level of 24-hour TSP and 1-hour TSP was recorded in the reporting month.
- 4.4. A total of two environmental complaints were received in the reporting month. After investigation with Contractor, precautionary measures had been proposed to the Contractor by ET. The interim reports for the complaints are shown in Appendix Q.
- 4.5. No non-compliance was reported in the reporting month.
- 4.6. No notification of summon and prosecution was received in the reporting period.
- 4.7. Statistics on complaints, notifications of summons and successful prosecutions are summarized in Appendix O.

5. EM&A SITE INSPECTION

- 5.1. Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting period, four (4) site inspections were carried out on 6, 13, 20 and 27 June 2024, along with bi-weekly inspection of the implementation of landscape and visual mitigation measures conducted on 20 June 2024.
- 5.2. One joint site inspection with IEC also undertaken on 20 June 2024. Minor deficiencies were observed during weekly site inspection. Key observations during the site inspections are summarized in Table 5.1.

Date	Environmental Observations	Follow-up Status
6 June 2024	 Drip tray should be provided for chemical containers at Zone 3. Housekeeping should be enhanced at Zone 3 and B2. 	 Chemical containers had been removed. Stagnant water has been cleaned and tank has been covered.
13 June 2024	1. Drip tray should be provided for chemical containers at Eastbound.	Drip tray has been provided.
20 June 2024	Drip tray should be provided for chemical containers at Zone B and Zone D.	Chemical containers have been removed.
27 June 2024	 Drip tray should be provided for chemical containers at Zone B3. Cement mixing platform should be properly covered at Zone B1. Construction materials should be kept out of tree protection zone at Zone A. 	 Chemical container has been removed. Cement mixing platform has been properly covered. Construction materials have been removed from tree protection zone.

Table 5.1 Site Observations

- 5.3. The Contractor had rectified all observation identified during environmental site inspection in the reporting period.
- 5.4. According to the EIA Study Report, Environmental Permit, contract documents and EM&A Manual, the mitigation measures detailed in the documents are implemented as much as practical during the reporting period. An updated Implementation Status of Environmental Mitigation Measures (EMIS) is provided in Appendix F.

6. FUTURE KEY ISSUES

6.1. The construction activities provided by Main Contractor in the next reporting month are:

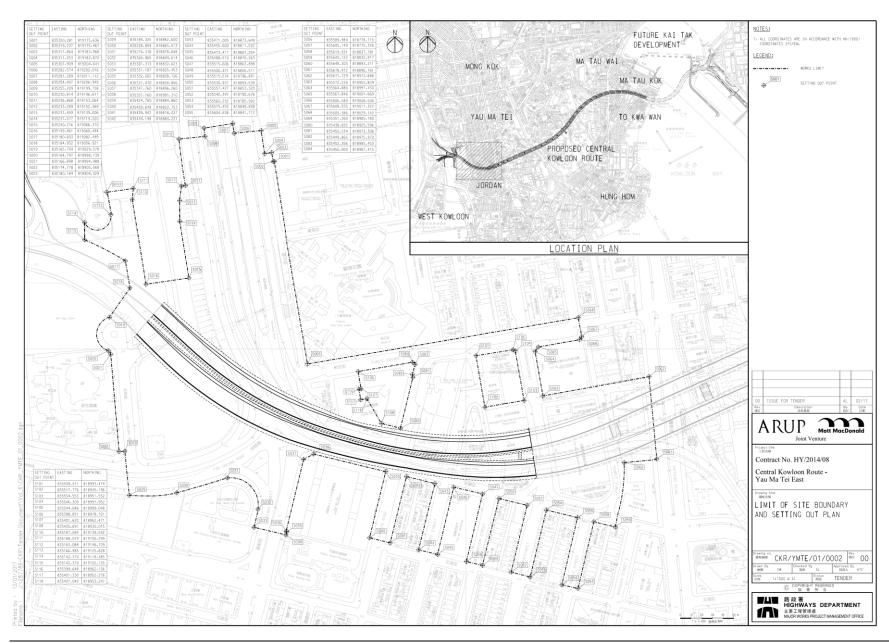
Construction Activities to be undertaken

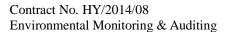
- Complete closing the temporary openings, remove ELS, remove ELS L1 & L2 and complete remaining road works at Zone A westbound
- Complete closing the openings and road works at Zone EB2/C1/C2/C3/D2/D3
- Excavation and install ELS below ceiling slab at Zone WB1 westbound
- Excavation down to ceiling slab, erect steel tower frame for underpinning works for existing pier C1/A1 at Zone B3 westbound
- Complete install hanger supports for CLP Cable Tunnel A, excavation and install ELS down to roof slab at Zone F
- Excavation down to roof slab and construct roof slab at Zone G1
- Excavate and install ELS from L5 to L7 at Zone G2
- Bridge Works:
 - i.Complete remaining deck construction (segments 10) and cast key segment at P4R
 - ii.FT2 installation at downhill side and deck construction for P6R
 - iii.End span construction including remedial works of recessing the MJ on existing GRF for P7R
- Continue erection of secondary tie beams and acoustic panels for Noise Enclosure F02 in Zone 3 (night works). Continue trial pit excavation and DN300 gas main diversion by HKCG along Ching Ping Street for C07
- Works at Zone 2 Noise Enclosure are the following:
 - i.Column A Complete Column Erection
 - ii.Column E Column Erection
 - iii.Column G Pending approval of TTA scheme for column erection
 - iv.Column C Pending access from tunnel construction for RC plinth construction
 - v.Column D Pending access for RC plinth construction
 - vi.Column H RC plinth construction
- Noise Enclosure steelworks fabrication at the Fabrication Yards in Zhuhai, China
- Construct boundary wall (retaining wall) at Rest Garden Monitoring of instrumentation for all areas
- Commence backfilling and reinstatement works at Zone B & C with site clearance, applying water proofing on top of roof slab and removal of ELS L3
- Monitoring of instrumentation for all areas
- 6.2. Potential environmental impacts arising from the above construction activities are mainly associated with dust, construction noise and waste management.
- 6.3. The tentative schedule of regular construction noise, 1-hour TSP and 24-hour TSP monitoring in the next reporting period is presented in Appendix P.
- 6.4. The construction programme for the Project for the next reporting month is presented in Appendix B.

7. CONCLUSION AND RECOMMENDATIONS

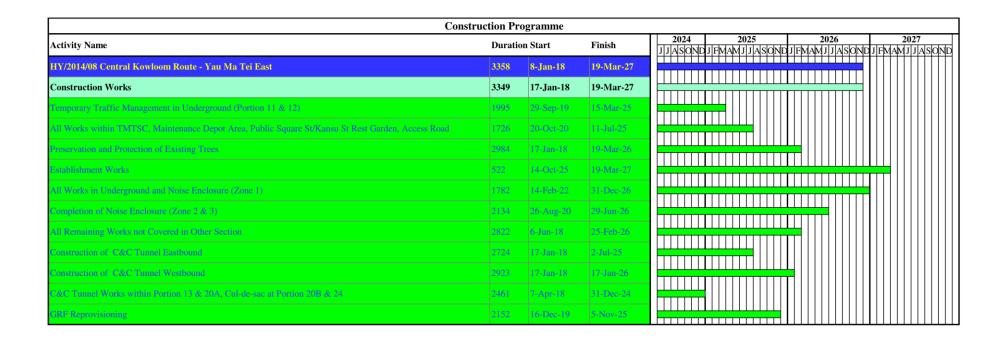
- 7.1. This 75th monthly EM&A Report presents the EM&A works undertaken during the period from 1 June 2024 to 30 June 2024 in accordance with the EM&A Manual and the requirement under EP- 457/2013/D and FEP-03/457/2013/D.
- 7.2. Two Action Level of construction noise were triggered during the reporting month as documented complaints were received. No exceedance of Limit Level of construction noise was recorded in the reporting month. No exceedance of the Action and Limit Level of 24-hour TSP and 1-hour TSP was recorded in the reporting month.
- 7.3. A total of two environmental complaints were received in the reporting month. After investigation with Contractor, precautionary measures had been proposed to the Contractor by ET. The interim reports for the complaints are shown in Appendix Q.
- 7.4. No non-compliance was reported in the reporting month.
- 7.5. No notification of summons or prosecution was received in the reporting month.
- 7.6. The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Environmental Monitoring & Auditing
Appendix A
Alignment and Works Area For the Contract No.
HY/2014/08





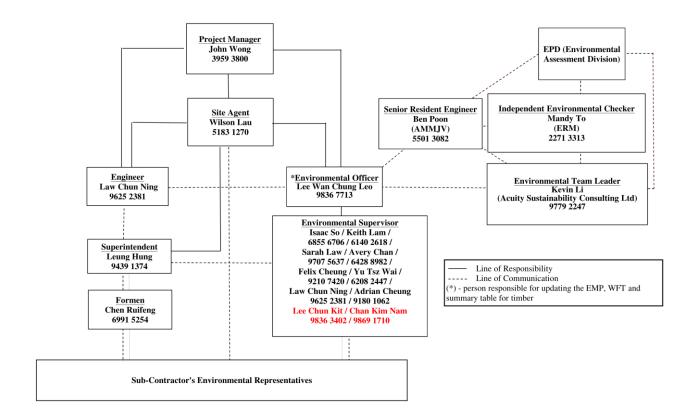
Appendix B
Construction Programme

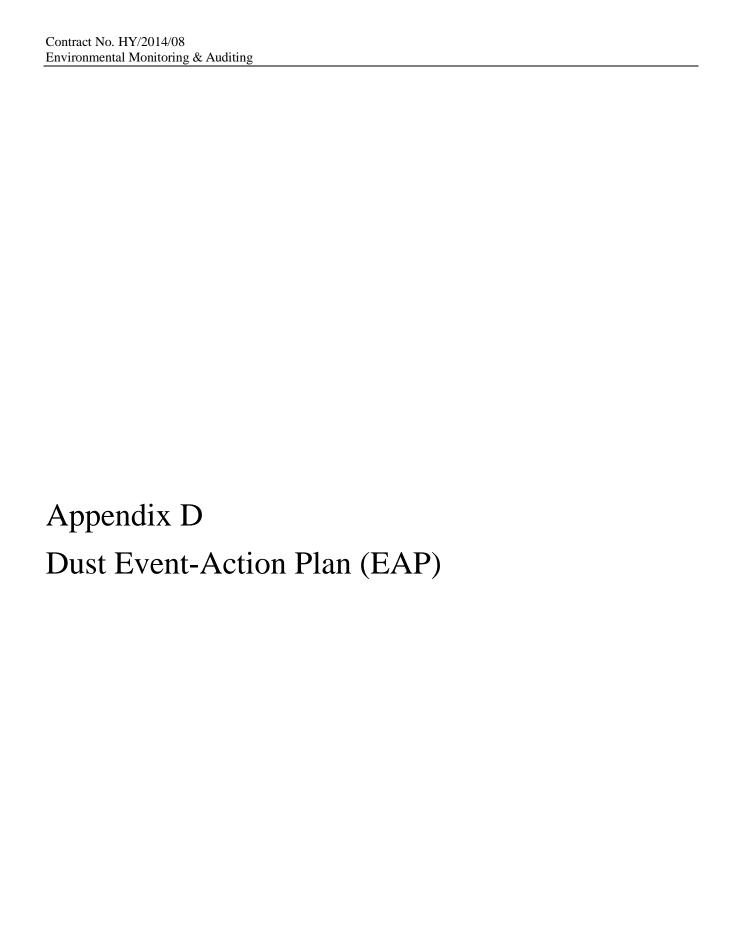


Contract No. HY/2014/08		
Environmental Monitoring & Auditing		

Appendix C Project Organization Chart

Project O-Chart





EVENT	ACTION							
EVENI	ET	IEC	ER	CONTRACTOR				
ACTION LEVEL								
1.Exceedance for one sample	 Identify source, investigate the causes of exceedance and propose remedial measures; Inform IEC and ER; Repeat measurement to confirm finding; Increase monitoring frequency to daily. 	 Check monitoring data submitted by ET; Check Contractor's working method. 	1. Notify Contractor.	 Rectify any unacceptable practice; Amend working methods if appropriate. 				
2.Exceedance for two or more consecutive samples	 Identify source; Inform IEC and ER; Advise the ER on the effectiveness of the proposed remedial measures; Repeat measurements to confirm findings; Increase monitoring frequency to daily; Discuss with IEC and Contractor on remedial actions required; If exceedance continues, arrange meeting with IEC and ER; If exceedance stops, cease additional monitoring. 	 Check monitoring data submitted by ET; Check Contractor's working method; Discuss with ET and Contractor on possible remedial measures; Advise the ET on the effectiveness of the proposed remedial measures; Supervise Implementation of remedial measures. 	Confirm receipt of notification of failure in writing; Notify Contractor; Ensure remedial measures properly implemented.	 Submit proposals for remedial to ER within 3 working days of notification; Implement the agreed proposals; Amend proposal if appropriate. 				
LIMIT LEVEL			•	•				
1.Exceedance for one sample	Identify source, investigate the causes of exceedance and propose remedial measures; Inform ER, Contractor and	 Check monitoring data submitted by ET; Check Contractor's working method; 	Confirm receipt of notification of failure in writing; Notify Contractor;	Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC				

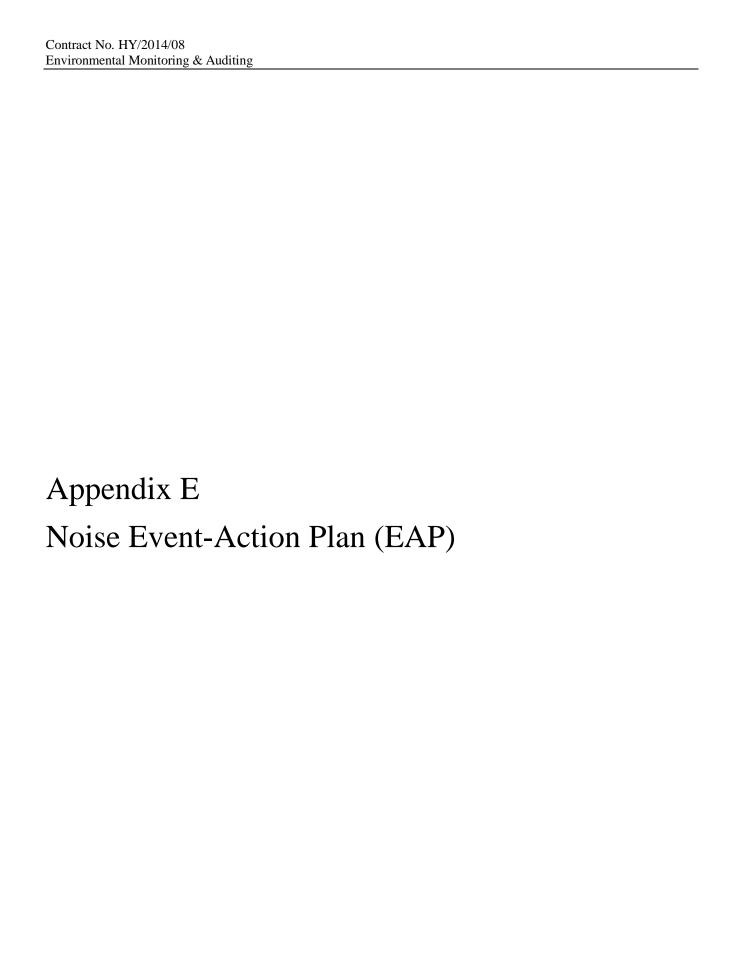
EVENT	ACTION				
EVENI	ET	IEC	ER	CONTRACTOR	
	 EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. 	 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures. 	3. Ensure remedial measures properly implemented.	within 3 working days of notification; Implement the agreed proposals; 4. Amend proposal if appropriate.	
2.Exceedance for two or more consecutive samples	 Notify IEC, ER, Contractor and EPD; Identify source; Repeat measurement to confirm findings; Increase monitoring frequency to daily; Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; Arrange meeting with IEC and ER to discuss the remedial actions to be taken; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; If exceedance stops, cease additional monitoring. 	 Discuss amongst ER, ET, and Contractor on the potential remedial actions; Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; Supervise the implementation of remedial measures. 	 Confirm receipt of notification of failure in writing; Notify Contractor; In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented; Ensure remedial measures properly implemented; If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. 	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within 3 working days of notification; Implement the agreed proposals; Resubmit proposals if problem still not under control; Stop the relevant portion of works as determined by the ER until the exceedance is abated. 	

Note:

ET – Environmental Team

ER – Engineer's Representative

IEC – Independent Environmental Checker



EVENT		ACTIO)N	
	ET	IEC	ER	CONTRACTOR
Action Level	 Identify source, investigate the causes of exceedance and propose remedial measures; Notify IEC and Contractor; Report the results of investigation to the IEC, ER and Contractor; Discuss with the Contractor and formulate remedial measures; Increase monitoring frequency to check mitigation effectiveness. 	 Review the analysed results submitted by the ET; Review the proposed remedial measures by the Contractor and advise the ER accordingly; Supervise the implementation of remedial measures. 	 Confirm receipt of notification of failure in writing; Notify Contractor; Require Contractor to propose remedial measures for the analysed noise problem; Ensure remedial measures are properly implemented 	 Submit noise mitigation proposals to IEC; Implement noise mitigation proposals.
Limit Level	 Identify source; Inform IEC, ER, EPD and Contractor; Repeat measurements to confirm findings; Increase monitoring frequency; Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; Inform IEC, ER and EPD the causes and actions taken for the exceedances; Assess effectiveness of Contractor's remedial actions 	 Discuss amongst ER, ET, and Contractor on the potential remedial actions; Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; Supervise the implementation of remedial measures. 	 Confirm receipt of notification of failure in writing; Notify Contractor; Require Contractor to propose remedial measures for the analysed noise problem; Ensure remedial measures properly implemented; If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is 	 Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within 3 working days of notification; Implement the agreed proposals; Resubmit proposals if problem still not under control; Stop the relevant portion of works as determined by the ER until the exceedance is abated.

EVENT	ACTION								
	ET	IEC	ER	CONTRACTOR					
	and keep IEC, EPD and ER informed of the results;		abated.						
	8. If exceedance stops, cease additional monitoring.								

Note:

ET – Environmental Team

IEC – Independent Environmental Checker

ER – Engineer's Representative

Contract No. HY/2014/08
Environmental Monitoring & Auditing

Appendix F
Environmental Mitigation Implementation
Schedule (EMIS)

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
			Constru	ction Dust Impact				
\$4.3.10	D1	The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	APCO To control the dust impact To meet HKAQO and TM-EIA criteria	Implemented
\$4.3.10	D2	 Mitigation measures in form of regular watering under a good site practice should be adopted. Watering once per hour on exposed worksites and haul road should be conducted to achieve dust removal efficiencies of 91.7%. While the above watering frequencies are to be followed, the extent of watering may vary depending on actual site conditions but should be sufficient to maintain an equivalent intensity of no less than 1.3 L/m² to achieve the dust removal efficiency. 	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	APCO To control the dust impact To meet HKAQO and TM-EIA criteria	• Implemented
\$4.3.10	D3	 Proper watering at exposed spoil should be undertaken throughout the construction phase; Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading; Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads; A stockpile of dusty material should not be 	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	APCO To control the dust impact To meet HKAQO and TM-EIA criteria	Implemented, deficiency rectified after observation

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		extended beyond the pedestrian barriers, fencing or traffic cones; The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle. Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores; When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided and properly maintained as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period; The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials; Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical						

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
\$4.3.10	D6	 continuously; Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet; Any skip hoist for material transport should be totally enclosed by impervious sheeting; Every stock of more than 20 bags of cement or dry-pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides; Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabilizer within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies. Implement regular dust monitoring under EM&A 	Monitoring of	Contractor	Selected rep.	Construction stage	• TM-FIA	• Implemented
S4.3.10	D6	Implement regular dust monitoring under EM&A programme during the construction stage.	Monitoring of dust impact	Contractor	Selected rep. dust monitoring station	Construction stage	• TM-EIA	Implemented

Acuity Sustainability Consulting Ltd.

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S5.4.1	N1	 Implement the following good site practices: Only well-maintained plant should be operated onsite and plant should be serviced regularly during the construction programme; Machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; Plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs; Silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works; Mobile plant should be sited as far away from NSRs as possible and practicable; Material stockpiles, mobile container site office and other structures should be effectively utilized, where practicable, to screen noise from on-site construction activities. 	Control construction airborne noise	Contractor	All construction sites	Construction stage	• Annex 5, TM-EIAO	• Implemented
S5.4.1	N2	Install temporary hoarding located on the site boundaries between noisy construction activities and NSRs. The conditions of hoardings shall be properly maintained throughout the construction period.	Reduce the construction noise levels at low-level zone of NSRs through partial screening	Contractor	All construction sites	Construction stage	• Annex 5, TM- EIAO	Implemented
\$5.4.1	N3	Install movable noise barriers (typical design is wooden framed barrier with a small-cantilevered on a skid footing with 25mm thick internal sound absorptive lining), acoustic mat or full enclosure,	Sreen the noisy plant items to be used at all construction	Contractor	All construction sites where practicable	Construction stage	• Annex 5, TM- EIAO	Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		screen the noisy plants including air compressors, generators and handheld breakers, etc.	sites					
S5.4.1	N4	Use 'Quiet plant'	Reduce the noise levels of plant items	Contractor	All construction sites where practicable	Construction stage	Annex 5, TM- EIAO	Implemented
S5.4.1	N5	Loading/ unloading activities should be carried out inside the full enclosure of mucking out points.	Reduce the noise levels of loading/ unloading activities	Contractor	Mucking out locations	Construction stage	• Annex 5, TM- EIAO	Implemented
S5.4.1	N6	Sequencing operation of construction plants where practicable.	Operate sequentially within the same work site to reduce the construction airborne noise	Contractor	All construction sites where practicable	Construction stage	• Annex 5, TM- EIAO	Implemented
S5.4.1	N7	Implement a noise monitoring programme under EM&A programme.	Monitor the construction noise levels at the selected representative locations	Contractor	Selected rep. noise monitoring station	Construction stage	• TM-EIAO	Implemented

Water Quality (Construction Phase)

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
\$6.9.1.1		In accordance with the Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection Department, 1994 (ProPECC PN1/94), construction phase mitigation measures shall include the following: Construction Runoff At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works and erosion and sedimentation control facilities implemented. Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided on site to direct stormwater to silt removal facilities. The design of the temporary on-site drainage system will be undertaken by the contractor prior to the commencement of construction; The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a silt/ sediment trap. The sediment/ silt traps should be incorporated in the permanent drainage channels to enhance deposition rates; The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94, which states that the retention time for silt/ sand traps should be 5 minutes under	To minimize water quality impact from the construction site runoff and general construction activities	Contractor	All construction sites where practicable	Construction stage	Water Pollution Control Ordinance ProPECC PN 1/94 TM-EIAO TM-DSS	Implemented, deficiency rectified after reminder

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		maximum flow conditions. Sizes may vary depending upon the flow rate, but for a flow rate of 0.1 m3/s a sedimentation basin of 30 m3 would be required and for a flow rate of 0.5 m3/s the basin would be 150 m3. The detailed design of the sand/silt traps shall be undertaken by the contractor prior to the commencement of construction; • All exposed earth areas should be completed and vegetated as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks where practicable. Exposed slope surfaces should be covered by tarpaulin or other means; • The overall slope of the site should be kept to a minimum to reduce the erosive potential of surface water flows, and all traffic areas and access roads protected by coarse stone ballast. An additional advantage accruing from the use of crushed stone is the positive traction gained during prolonged periods of inclement weather and the reduction of surface sheet flows; • All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas; • Measures should be taken to minimize the ingress of site drainage into excavations. If the excavation						

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities; Open stockpiles of construction materials (for example, aggregates, sand and fill material) of more than 50m3 should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system; Manholes should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers; Precautions be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarized in Appendix A2 of ProPECC PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes; All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and site wheel washing facilities should be provided at every construction						

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		site exit where practicable. Wash-water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel wash bay to the public road should be paved with sufficient backfall toward the wheel wash bay to prevent vehicle tracking of soil and silty water to public roads and drains; Oil interceptors should be provided in the drainage system downstream of any oil/ fuel pollution sources. The oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. A bypass should be provided for the oil interceptors to prevent flushing during heavy rain; Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts; All fuel tanks and storage areas should be provided with locks and sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby; Adopt best management practices; All earth works should be conducted sequentially to limit the amount of construction runoff generated from exposed areas during the wet season (April to January) as far as practicable.						

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/or standards to be achieved	Implementation Status
S6.9.1.2	W2	 Cut-&-cover tunneling work should be conducted sequentially to limit the amount of construction runoff generated from exposed areas during the wet season (April to January) as far as practicable. Uncontaminated discharge should pass through sedimentation tanks prior to off-site discharge; The wastewater with a high concentration of SS should be treated (e.g. by sedimentation tanks with sufficient retention time) before discharge. Oil interceptors would also be required to remove the oil, lubricants and grease from the wastewater; Direct discharge of the bentonite slurry (as a result of D-wall) is not allowed. It should be reconditioned and reused wherever practicable. Temporary storage locations (typically a properly closed warehouse) should be provided on site for any unused bentonite that needs to be transported away after all the related construction activities area completed. The requirements in ProPECC PN 1/94 should be adhered to in the handling and disposal of bentonite slurries. 	To minimize construction water quality impact from tunneling works	Contractor	All tunneling portion	Construction stage	Water Pollution Control Ordinance ProPECC PN 1/94 TM-DSS TM-EIAO	• Implemented
\$6.9.1.3	W3	Portable chemical toilets and sewage holding tanks are recommended for handling the construction sewage generated by the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be	To minimize water quality from sewage effluent	Contractor	All construction sites where practicable	Construction stage	Water Pollution Control Ordinance TM-DSS	Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		responsible for appropriate disposal and maintenance.						
S6.9.1.5	W4	 No direct discharge of groundwater from contaminated areas should be adopted. A discharge license under the WPCO through the Regional Office of EPD for groundwater discharge should be applied. Prior to the excavation works within these potentially contaminated areas, the groundwater quality should be reviewed during the process of discharge license application. The compliance to the Technical Memorandum on Standards for Effluents Discharged into Drainage on Sewerage Systems, Inland and Coastal Waters (TM-DSS) and the existence of prohibited substance should be confirmed. If the review results indicated that the groundwater to be generated from the excavation works would be contaminated, the contaminated groundwater should be either properly treated in compliance with the requirements of the TM-DSS or properly recharged into the ground. If wastewater treatment is deployed, the wastewater treatment unit shall deploy suitable treatment process (e.g. oil interceptor / activated carbon) to reduce the pollution level to an 	To minimize groundwater quality impact from contaminated area	Contractor	Excavation areas where contamination is found	Construction stage	Water Pollution Control Ordinance TM-DSS TM-EIAO	• Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		acceptable standard and remove any prohibited substances (e.g. TPH) to undetectable range. All treated effluent from wastewater treatment plant shall meet the requirements as stated in TM-DSS and should be discharged into the foul sewers. • If groundwater recharging wells are deployed, recharging wells should be installed as appropriate for recharging the contaminated groundwater back into the ground. The recharging wells should be selected at places where the groundwater quality will not be affected by the recharge operation as indicated in the Section 2.3 of TM-DSS. The baseline groundwater quality shall be determined prior to the selection of the recharge wells, and submit a working plan (including the laboratory analytical results showing the quality of groundwater at the proposed recharge location(s) as well as the pollutant levels of groundwater to be recharged) to EPD for agreement. Pollution levels of groundwater to be recharged shall not be higher than pollutant levels of ambient groundwater at the recharge well. Prior to recharge, any prohibited substances such as TPH products should be removed as necessary by installing the petrol interceptor.						
\$6.9.1.6	W6	Accidental Spillage In order to prevent accidental spillage of chemicals, the following is recommended:	To minimize water quality impact from accidental	Contractor	All construction site where practicable	Construction stage	Water Pollution Control Ordinance	Implemented, deficiency rectified after reminder

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		 All the tanks, containers, storage area should be bunded and the locations should be locked as far as possible from the sensitive watercourse and stormwater drains; The Contractor should register as a chemical waste producer if chemical wastes would be generated. Storage of chemical waste arising from the construction activities should be stored with suitable labels and warnings. Disposal of chemical wastes should be conducted in compliance with the requirements as stated in the Waste Disposal (Chemical Waste) (General) Regulation. 	spillage				 ProPECC PN 1/94 TM-EIAO TM-DSS 	
			Waste Manage	ement (Construction	Waste)			
\$7.4.1	WM1	On-site sorting of C&D material Geological assessment should be carried out by competent persons on site during excavation to identify materials which are not suitable to use as aggregate in structural concrete (e.g. volcanic rock, Aplite dyke rock, etc.). Volcanic rock and Aplite dyke rock should be separated at the source sites as far as practicable and stored at designated stockpile area preventing them from delivering to crushing facilities. The crushing plant operator should also be reminded to set up measures to prevent unsuitable rock from ending up at concrete	Separation of unsuitable rock from ending up at concrete batching plants and be turned into concrete for structural use	Contractor	All construction sites	Construction stage	• DEVB (W) No. 6/2010	• Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
\$7.5.1	WM2	batching plants and be turned into concrete for structural use. Details regarding control measures at source site and crushing facilities should be submitted by the Contractor for the Engineer to review and agree. In addition, site records should also be kept for the types of rock materials excavated and the traceability of delivery will be ensured with the implementation of Trip Ticket System and enforced by site supervisory staff as stipulated under DEVB TC(W) No. 6/2010 for tracking of the correct delivery to the rock crushing facilities for processing into aggregates. Alternative disposal option for the reuse of volcanic rock and Aplite Dyke rock, etc. should be explored.	Good site	Contractor	All	Construction stage	• Land	• Implemented
37.3.1	VVIVIZ	 Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement; Carry out on-site sorting; Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate; Adopt 'selective demolition' technique to demolish the existing structures and facilities with a view to recovering broken concrete effectively for recycling purpose, where possible; Implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified; and 	practice to minimize the waste generation and recycle the C&D materials as far as practicable so as to reduce the amount for final disposal	Contractor	construction sites	Construction stage	(Miscellaneo us Provisions) Ordinance Waste Disposal Ordinance ETWB TCW No. 19/2005	mplemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		• Implement an enhanced Waste Management Plan similar to ETWBTC (Works) No. 19/2005 — "Environmental Management on Construction Sites" to encourage on-site sorting of C&D materials and to minimize their generation during the course of construction.						
S7.5.1	WM3	 C&D Waste Standard formwork or pre-fabrication should be used as far as practicable in order to minimize the arising of C&D materials. The use of more durable formwork or plastic facing for the construction works should be considered. Use of wooden hoardings should not be used, as in other projects. Metal hoarding should be used to enhance the possibility of recycling. The purchasing of construction materials will be carefully planned in order to avoid over ordering and wastage; The Contractor should recycle as much of the C&D materials as possible on-site. Public fill and C&D waste should be segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal. Where practicable, concrete and masonry can be crushed and used as fill. Steel reinforcement bar can be used by scrap steel mills. Different areas of the sites should be considered for such segregation and storage. 	Good site practice to minimize the waste generation and recycle the C&D materials as far as practicable so as to reduce the amount for final disposal	Contractor	All construction sites	Construction stage	Land (Miscellaneo us Provisions) Ordinance Waste Disposal Ordinance ETWB TCW No. 19/2005	• Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
\$7.5.1	WM5	 All construction plant and equipment shall be designed and maintained to minimize the risk of silt, sediments, contaminants or other pollutants being released into the water column or deposited in the locations other than designated location; All vessels shall be sized such that adequate draft is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; Before moving the vessels which are used for transporting dredged material, excess material shall be cleaned from the decks and exposed fittings of vessels and the excess materials shall never be dumped into the sea except at the approved locations; Adequate freeboard shall be maintained on barges to ensure that decks are not washed by wave action. The Contractors shall monitor all vessels transporting material to ensure that no dumping outside the approved location takes place. The Contractor shall keep and produce logs and other records to demonstrate compliance and that journeys are consistent with designated locations and copies of such records shall be submitted to the engineers; The Contractors shall comply with the conditions in the dumping licence. 	To control pollution due to marine sediment	Contractor	Along CKR alignment	Construction stage	• ETWB TCW No. 34/2002	• Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		 All bottom dumping vessels (Hopper barges) shall be fitted with tight fittings seals to their bottom openings to prevent leakage of material; The material shall be placed into the disposal pit by bottom dumping; Contaminated marine mud shall be transported by spit barge of not less than 750m3 capacity and capable of rapid opening and discharge at the disposal site; Discharge shall be undertaken rapidly and the hoppers shall be closed immediately. Material adhering to the sides of the hopper shall not be washed out of the hopper and the hopper shall remain closed until the barge returns to the disposal site. For Type 3 special disposal treatment, sealing of contaminant with geosynthetic containment before dropping designated mud pit would be a possible arrangement. A geosynthetic containment method is a method whereby the sediments are sealed in geosynthetic containers and, the containers would be dropped into the designated contaminated mud pit where they would be covered by further mud disposal and later by the mud pit capping at the disposal site, thereby fulfilling the requirements for fully confined mud disposal. 						
S7.5.1	WM6	Chemical Waste ■ Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, should be handled in	Control the chemical waste and ensure proper storage,	Contractor	All construction sites	Construction stage	Waste Disposal (Chemical Waste)	Implemented, deficiency rectified after observation

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes; Containers used for the storage of chemical wastes should be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed, have a capacity of less than 450 L unless the specification has been approved by EPD, and display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the regulation; The storage area for chemical wastes should be clearly labelled and used solely for the storage of chemical waste, enclosed on at least 3 sides, have an impermeable floor and bunding of sufficient capacity to accommodate 110% of the volume of the largest container or 20% of the total volume of waste stored in that area, whichever is the greatest, have adequate ventilation, covered to prevent rainfall entering, and arranged so that incompatible materials are adequately separated; Disposal of chemical waste should be via a licensed waste collector, be to a facility licensed to receive chemical waste, such as the Chemical Waste Treatment Centre which also offers a chemical waste collection service and can supply the necessary storage containers, or be to a reuser of the waste, under approval from EPD.	handling and disposal				(General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Waste	

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
\$7.5.1	WM7	 General Refuse General refuse generated on-site should be stored in enclosed bins or compaction units separately from construction and chemical wastes; A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimize odour, pest and litter impacts. Burning of refuse on construction sites is prohibited by law. Aluminum cans are often recovered from the waste stream by individual collectors if they are segregated and made easily accessible. Separate labelled bins for their deposit should be provided if feasible; Office wastes can be reduced through the recycling of paper if volumes are large enough to warrant collection. Participation in a local collection scheme should be considered by the Contractor. 	Minimize production of the general refuse and avoid odour, pest and litter impacts	Contractor	All construction sites	Construction stage	Waste Disposal Ordinance	Implemented, deficiency rectified after observation
	I.		Land Contamin	ation				
S8.9 & Appendix 8.4	LC2	Prior to commencement of the excavation works at the contamination zone, the zone should be clearly marked out on site and the surface levels recorded. Excavation of contaminated material should be undertaken using dedicated earth-moving plant. The excavated contaminated soils would be stockpiled at designated area on site and covered by sheet to prevent dispersion of contamination	The contaminated soil will be excavated for on-site reuse	Contractor	РВН4	Prior to commencement of construction works within the contaminated area	 Practice Guide (PG) for Investigation and Remediation of Contaminate d Land 	• Implemented

EIA Ref.	EM&A Log Ref.	Reco	mmended Mitigat	tion Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		during stockpiling. • The Contractor should pay attention to the selection of suitable groundwater lowering schemes and discharge points if the groundwater table is higher than the contaminated soils during excavation. The Contractor should also obtain a valid Water Pollution Control Ordinance (WPCO) discharge licence from EPD where applicable.							Guidance Notes for Contaminate d Land Assessment and Remediation Guidance	
S8.9 & Appendix 8.4	LC3							Manual for Use of Risk- Based Remediation Goals (RBRGs) for Contaminate	Implemented	
								d Land Management		

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
Appendix	LC4	excavation, sampling and compliance testing should continue until all contaminated materials are removed and should be supervised by a Land Contamination Specialist. A Remediation Report (RR) to demonstrate adequate						Implemented
8.4		clean-up shall be prepared and submitted to EPD for endorsement prior to the commencement of any construction/development works within the sites. No construction/development works shall be carried out prior to the endorsement of the RR by EPD.						
				Hazard to Life				
\$9.18	H1	Blasting activities regarding transport and use of explosives should be supervised and audited by competent site staff to ensure full compliance with the blasting permit conditions.	To ensure that the risks from the proposed explosives handling and transport would be acceptable	Contractor	Works areas at which explosives would be used	Construction stage	Dangerous Goods Ordinance	• N/A
S9.6, para.4	H2	Detonators shall not be transported in the same vehicle with other Category 1 Dangerous Goods.	To reduce the risk of explosion during the transport of cartridged emulsion	Contractor	-	Construction stage	Dangerous Goods Ordinance	• N/A
S9.6, para.8	Н3	The explosives delivery trucks should be approved by Mines Division and should meet the regulatory requirements for transport of explosives.	To comply with the requirements for approval of an explosives	Contractor	-	Construction stage	Dangerous Goods Ordinance	• N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
			delivery vehicle					
S9.10, para.7 and S9.18	H4	Blast cover should be provided for shaft at HMT, and kept closed during blasting. Provision of blast doors or heavy duty blast curtains should be implemented at the shaft to prevent flyrock and control the air overpressure.	To ensure safe use of explosives	Contractor	Shaft	Construction stage	-	• N/A
\$9.16	Н5	Only the required quantity of explosives for a particular blast should be transported to avoid the return.	To reduce risks during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
S9.18	H7	The approved truck dedicated for transport of explosives should comply with the "Guidance Note on Requirements for Approval of an Explosives Delivery Vehicle" issued by CEDD Mines Division. The truck should be periodically inspected and properly maintained in good operation conditions. The fuel carried in the fuel tank should be minimized to reduce the duration of fire. Adequate fire fighting equipment shall be provided, inspected and replaced periodically (e.g. fire extinguishers).	To reduce the risk during explosives transport	Contractor	Works areas of which explosives would be used	Construction stage	Dangerous Goods Ordinance	• N/A
\$9.18	Н8	The driver and his assistant should be physically healthy, experienced and have good safe driving records. The driver should hold a proper driving licence for the approved transport truck. Dedicated training programme and regular road safety briefing	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		sessions/ workshops should be provided to enhance their safe driving attitude and practice. Smoking should be strictly prohibited.						
S9.18	Н9	Emergency response plans in case of road accident should be prepared and implemented. The driver and his assistant should be familiar with the emergency procedures including evacuation, and proper communication/ fire-fighting equipment should be provided to the driver and his assistant.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
\$9.18	H10	Close liaison and communication among Mines Division, Contractors for transport of explosives, and working staff of the blasting should be established. In case of any change of work schedule leading to cancellation or variation of explosives required, relevant parties should be informed in time to avoid unused explosives at the work sites.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
\$9.18	H11	Close liaison and communication with Fire Services Department should be established to reduce the accidental detonation escalated from a fire. The contractors for transport of explosives should use the preferred transport routes as far as practicable.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
S9.18	H12	Contingency plan should be prepared for transport of explosives under severe weather conditions such as rainstorms and thunderstorms.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S9.18	H13	For explosive transport, all packages of explosives on the truck should be properly stored in the truck compartment as required. Packaging of the explosives should remain intact (i.e. damage free) until they are transferred to the blasting site.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
S9.18	H14	Availability of a parking space should be ensured before commencement of transport of explosives. Location for loading and unloading of explosives should be as close as possible to the shaft. No hot work should be performed in the vicinity during the time of loading and unloading.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
S9.18	H22	It is recommended to explore to minimize the use of the cartridged emulsion explosives and maximize the use of bulk emulsion explosive as far as practicable.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
S9.18	H24	It is recommended to explore to use smaller explosive charges such as 'cast boosters' or 'mini-cast booster' instead of cartridged emulsion as primers for bulk emulsion. This option reduces the quantity of explosives required for transportation for the sections where bulk emulsion will be used.	To reduce the risk during explosives transport	Contractor	Works areas at which explosives would be used	Construction stage	-	• N/A
			Lan	dscape & Visual				
S10.10.1 Table 10.11	LV3	Good Site Management Large temporary stockpiles of excavated material shall be covered with unobtrusive sheeting to prevent dust and dirt spreading to adjacent landscape areas and vegetation, and to create a neat and tidy visual appearance.	Minimize visual impact	Contractor	Within Project site	Construction stage	-	Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		 Construction plant and building material shall be orderly and carefully stored in order to create a neat and tidy visual appearance. 						
S10.10.1 Table 10.11	LV4	 Screen Hoarding Decorative screen hoarding should be erected to screen the public from the construction area. It should be designed to be compatible with the existing urban context. 	Minimize visual impact	Contractor	Within Project site	Construction stage	-	Implemented
S10.10.1 Table 10.11	LV5	Lighting Control during Construction All lighting in the construction site shall be carefully controlled to minimize light pollution and night-time glare to nearby residencies and GIC. The Contractor shall consider other security measures, which shall minimize the visual impacts.	Minimize visual impact	Contractor	Within Project site	Construction stage	-	Implemented
S10.10.1 Table 10.11	LV6	Erosion Control The potential for soil erosion shall be reduced by minimizing the extent of vegetation disturbance on site and by providing a protective cover over newly exposed soil.	Minimize landscape impact	Contractor	Within Project site	Construction stage	-	• N/A
S10.10.1 Table 10.11	LV7	Tree Protection & Preservation Carefully protected during construction. Tree protection measures will be detailed at the Tree Removal Application stage and plans submitted to the relevant Government Department for approval in due course in accordance with ETWB TC no. 3/2006.	Minimize landscape and visual impact	Contractor	Within Project site	Construction stage	• 'Guidelines for Tree Risk Management and Assessment Arrangement on an Area Basis and on a Tree Basis', Greening,	Implemented, deficiency rectified after observation

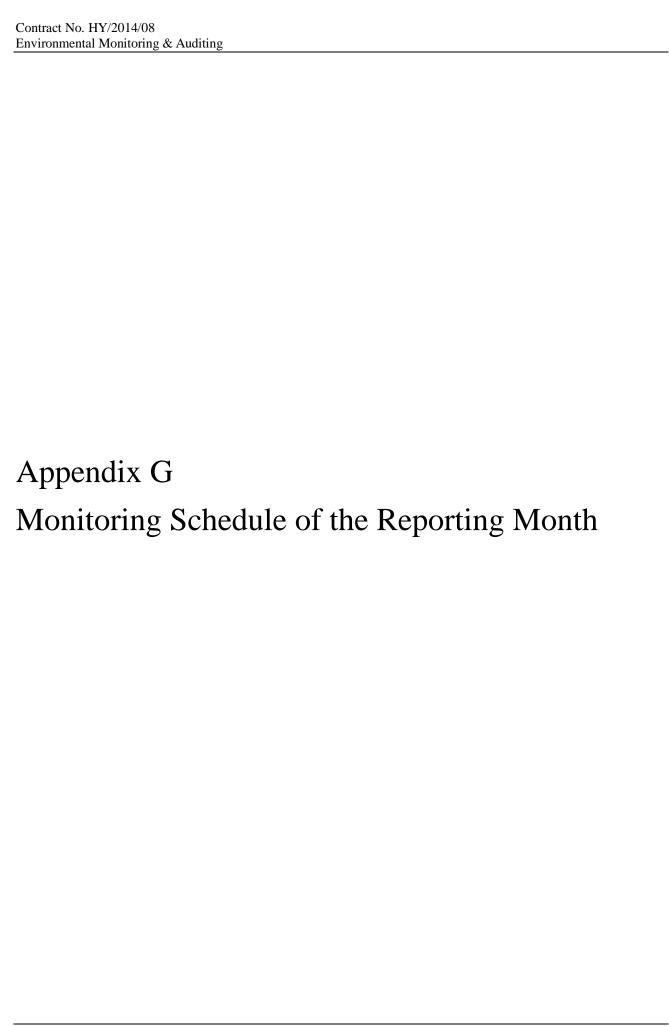
EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S10.10.1 Table 10.11	LV8	Tree Transplantation • For trees unavoidably affected by the Project that have to be removed, where practical transplantation will be chosen as the top priority method of removal. If this is not possible or practical compensatory planting will be provided for trees unavoidably felled (See LV10). For trees unavoidably affected by the Project works that are transplanted, transplantation must be carried out in accordance with ETWB TCW 2/2004 and 3/2006.	Minimize landscape and visual impact	Contractor	Within Project site and designated off-site locations	Prior to Construction stage	Landscape and Tree Management (GLTM) Section, DEVB Latest recommende d horticultural practices from GLTM Section, DEVB ETWB TCW 3/2006 Latest recommende d horticultural practices from Greening, Landscape and Tree Management (GLTM) Section, DEVB	• N/A

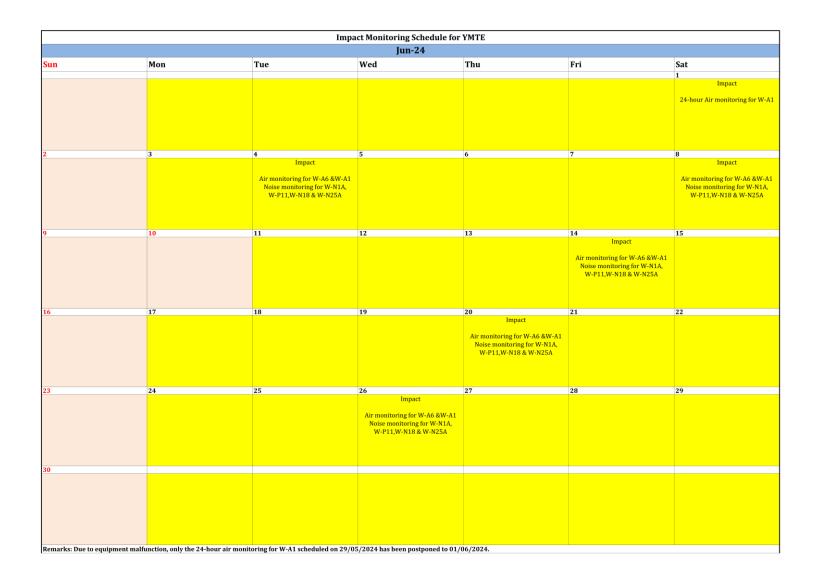
EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
							2/2004	
S10.10.1 Table 10.11	LV9	 Compensatory Planting For trees unavoidably affected by the Project that have to be removed, where practical transportation will be chosen as the top priority method of removal but if this is not possible or practical compensatory planting will be provided for trees unavoidably felled. All felled trees shall be compensated for by planting trees to the satisfaction of relevant Government projects. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application process under ETWBTC 3/2006. Compensatory tree planting may be incorporated into public open spaces and along roadside amenity areas affected by the construction works and therefore be part of the bigger wider planting plans. Onsite compensation planting is preferred but if necessary, additional receptor sites outside the Works Area shall be agreed separately with Government during the Tree Felling Application process. 	Minimize visual impact and also enhance landscape	Contractor	Within Project site	Construction stage	ETWB TCW 3/2006 Latest recommende d horticultural practices from Greening, Landscape and Tree Management (GLTM) Section, DEVB ETWB TCW 2/2004	• N/A
			Cultural Heritage	Impact (Constructi	on Phase)			

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
S11.4.4	CH1	The contractor should be alerted during the construction on the possibility of locating archaeological remains and as a precautionary measure, AMO shall be informed immediately in case of discovery of antiquities or supposed antiquities in the subject sites.	To preserve any cultural heritage items which may be removed and damaged by the excavation	Contractor	During construction works for cut and cover tunnels	Construction stage	AMOs requirements	Implemented
S12.6.1	CH3	 Protective covering should be provided for the buildings in the form of plastic sheeting; Buffer zones should be provided between the construction works and the external walls of the buildings and should be as large as site restrictions allow and be marked out by temporary fencing or hoarding; An underpinning scheme is required to transfer the existing column loadings to a deeper rock stratum. The supporting system includes cutting the existing ground floor slab to expose the existing pile caps and then construct transfer beams at both sides of the pile caps. The transfer beams will tie up with the existing caps. Loadings of the transfer beams will be transferred to the rock socket piles installed at the two ends of the beams; The AAA settlement and tilting limit should be 6/8/10 mm and1/2000, 1/1500 and 1/1000; Monitoring of vibration levels will be undertaken during the construction phase and the Alert, Alarm and Action (AAA) vibration limit will be set at 5/6/7.5 mm/s. The monitoring proposal should be sent to AMO for comment; 	Protect the building from damage from construction works	Contractor	Yau Ma Tei Police Station (Old Wing) (CKR-01)	Prior to commencement of and during the construction phase	Guidelines for Cultural Heritage Impact Assessment EIAO-TM Annex 10 and Annex 19 AMO Proposed Vibration Limits	• Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
		 Regular site inspections and monitoring works will be carried out by the contractor and the monitoring results will be submitted to the resident site staff of HyD to ensure compliance. 						
S12.6.1		 Adopting diaphragm wall construction method; Grout curtain should be provided in front of the building; Recharging system should be installed as a contingency measure to mitigate the fluctuation of water table; the AAA settlement and tilting limit should be 6/8/10 mm and 1/2000, 1/1500 and 1/1000; Monitoring of vibration levels will be undertaken during the construction phase and the Alert, Alarm and Action (AAA) vibration limit will be set at 5/6/7.5 mm/s. The monitoring proposal should be sent to AMO for comment; Regular site inspections and monitoring works will be carried out by the contractor and the monitoring results will be submitted to the resident site staff of HyD to ensure compliance. 	Protect the building from damage from construction works	Contractor	Yau Ma Tei Police Station (Old Wing) (CKR-01)	Prior to commencement of and during the construction phase	Guidelines for Cultural Heritage Impact Assessment EIAO-TM Annex 10 and Annex 19 AMO Proposed Vibration Limits	• Implemented
S12.6.1 Table 12.2		 The Alert, Alarm and Action (AAA) vibration limit will be set at 3/4/5 mm/s and a condition survey shall be carried out by the project proponent prior to the construction phase to confirm this assessment Vibration monitoring of the structure shall be employed during the construction phase to ensure that the level is not exceeded. The monitoring proposal should be sent to AMO for comment. 	Protect the building from damage from construction works	Contractor	Tin Hau Temple (CKR- 02)	Prior to commencement of and during the construction phase	Guidelines for Cultural Heritage Impact Assessment EIAO-TM Annex 10 and Annex 19 AMO	Implemented

EIA Ref.	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommende d Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and/ or standards to be achieved	Implementation Status
							Proposed Vibration Limits	
				EM&A Project	•			
S13.2	EM1	An Independent Environmental Checker needs to be employed as per the EM&A Manual	Control EM&A Performance	Highways Department	All construction sites	Construction stage	• EIAO Guidance Note No. 4/2010 • TM-EIAO	Implemented
\$13.2-13.4	EM2	 An Environmental Team needs to be employed as per the EM&A Manual; Prepare a systematic Environmental Management Plan to ensure effective implementation of the mitigation measures; An environmental impact monitoring needs to be implemented by the Environmental Team to ensure all the requirements given in the EM&A Manual are fully complied with. 	Perform environmental monitoring & auditing	Highways Department/ Contractor	All construction sites	Construction stage	• EIAO Guidance Note No. 4/2010 • TM-EIAO	Implemented





Contract No. HY/2014/08
Environmental Monitoring & Auditing

Appendix H
Calibration Certificates
(Air Monitoring)



Sibata LD-5R K-Factor Verification Test by Total Suspended Particulates HVS Test Report

Information of Calibrated Equipement

			ioimation or	cambratea Equipernent	
Verification Test Date:	28-Nov-23	to	30-Nov-23	Next Verification Test Date:	28-Nov-24
Unit-under-Test- Model No.:	Sibata LD-5R			•	
Unit-under-Test Serial No.:	761172			•	
Our Report Refrence No.:	RPT-23-HVS-0066		56	•	
Calibration Location:	AM2, location near the Leachate Treatment Work			eatment Works within the NENTX Landfill	
-					•

Standard Equipment Information

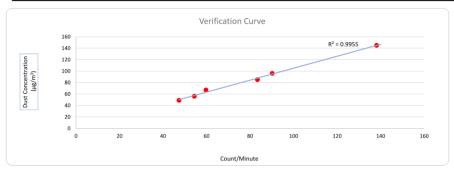
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5025A
Equipment serial no.:	1106	4166
Last Calibration Date:	4-Nov-23	19-Jun-23
Next Calibration Date:	3-Jan-24	19-Jun-24

Equipement Vertification Result

Verification		Duration			Results from Calibrated Equipement		Results from Standard Equipment
Test No.	Date	Start-time End-time		Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration (μg/m³) y-axis
1	28/11/2023	8789.68	8792.68	180.00	16234	90	96
2	28/11/2023	8792.68	8795.68	180.00	15010	83	85
3	28/11/2023	8795.68	8798.68	180.00	8526	47	49
4	30/11/2023	8798.68	8801.68	180.00	10756	60	67
5	30/11/2023	8801.68	8804.68	180.00	24867	138	145
6	30/11/2023	8804.68	8807.68	180.00	9785	54	56

Linear Regression of y on x

1	Slope, K factor:	1.0443	Intercept:	0.6370	*Correlation Coefficient,R:	0.9978
	Verification Test Result:	Strong Correlation,	Results were accepted.		* If the Correlation Coefficient, R is <0.5. Chec	king and Re-verification are required.



Operated By:

Andy Li
Project Technician, Environmental

Checked By:

Tandy Tse

Date: 30-11-2023



Sibata LD-5R K-Factor Verification Test by Total Suspended Particulates HVS Test Report

Information of Calibrated Equipement

Verification Test Date:	28-Nov-23	to	30-Nov-23	Next Verification Test Date:	28-Nov-24
Unit-under-Test- Model No.:		Sibata LD-5R			
Unit-under-Test Serial No.:		992821			
Our Report Refrence No.:	F	RPT-23-HVS-007	72		
Calibration Location:	AM2	location near			

Standard Equipment Information

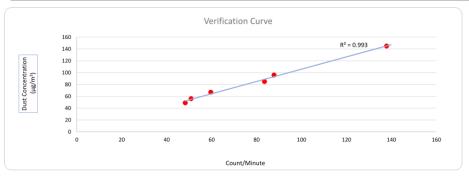
	otaliaala Equipilicite	mornium die
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5025A
Equipment serial no.:	1106	4166
Last Calibration Date:	4-Nov-23	19-Jun-23
Next Calibration Date:	3-Jan-24	19-Jun-24

Equipement Vertification Result

Verification			Duration			Calibrated Equipement	Results from Standard Equipment
Test No.	Date	Start-time End-tin		Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration (μg/m³) y-axis
1	28/11/2023	8789.68	8792.68	180.00	15798	88	96
2	28/11/2023	8792.68	8795.68	180.00	15038	84	85
3	28/11/2023	8795.68	8798.68	180.00	8687	48	49
4	30/11/2023	8798.68	8801.68	180.00	10732	60	67
5	30/11/2023	8801.68	8804.68	180.00	24813	138	145
6	30/11/2023	8804.68	8807.68	180.00	9156	51	56

Linear Regression of y on x





Operated By:

Andy Li
Project Technician, Environmental

Checked By:

Tandy Tse
Senjor Consultant, Environmental

Date: 30-11-2023



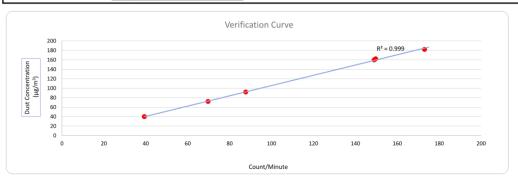
PC-3A(E) K-Factor Verification Test by Total Suspended Particulates HVS Test Report

Information of Calibrated Equipement								
Verification Test Date:	19-Mar-24	to	24-Mar-24	Next Verification Test Date:	19-Mar-25			
Unit-under-Test- Model No.:		PC-3A(E)		_				
Unit-under-Test Serial No.:		JC-2002222						
Our Report Refrence No.:	ŀ	PRT-24-HVS-0041						
Calibration Location:			E	max				
-								

		Standard Equipment Informat	tion
Γ	Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
1	Standard Equipment Model No.:	TE-5170X	TE-5025A
1	Equipment serial no.:	1049	3465
l	Last Calibration Date:	19-Mar-24	15-Jan-24
ı	Next Calibration Date:	2-Apr-24	15-Jan-25

Equipement Vertification Result Duration Results from Calibrated Equipement Results from Standard Equipment Date Elapsed Time Counts/ Minute Test No. Dust Concentration (μg/m³) Start-time **Total Counts End-time** y-axis 26946 19/03/2024 7953.66 150 7956.66 180.00 162 19/03/2024 7956.66 7959.66 180.00 149 160 31140 182 3 19/03/2024 7959.66 7962.66 180.00 173 24/03/2024 7985.12 7988.12 180.00 7074 39 24/03/2024 7988.12 7991.12 180.00 15786 88 92 24/03/2024 7991.12 7994.12 180.00 12546 70 72

Linear Regression of y on x							
Slope, K factor:	1.0840	Intercept:	-2.7589	*Correlation Coefficient,R:	0.9995		
Verification Test Result:	Strong Correlation, Results were accepted.			* If the Correlation Coefficient, R is < 0.5. Checking and Re-verification are required.			



Operated By:

Andy Li
Project Technician, Environmental

Checked By:

Tandy Tse
Senior Consultant, Environmental

Date: 29-03-2024

Date: 29-03-2024



PC-3A(E) K-Factor Verification Test by Total Suspended Particulates HVS Test Report

Information of Calibrated Ed	uipement
------------------------------	----------

Verification Test Date:	19-Mar-24	to	24-Mar-24	Next Verification Test Date:	19-Mar-25
Unit-under-Test- Model No.:		PC-3A(E)		_	
Unit-under-Test Serial No.:		JC-2002225		-	
Our Report Refrence No.:	P	RT-24-HVS-003	36	-	
Calibration Location:				Emax	
_					-

Standard Equipment Information

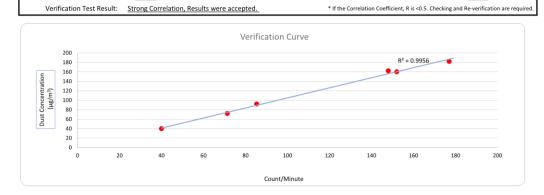
Verification Equipment Type:	Tisch TSP HVS	Tisch HVS Calibrator
Standard Equipment Model No.:	TE-5170X	TE-5025A
Equipment serial no.:	1049	3465
Last Calibration Date:	19-Mar-24	15-Jan-24
Next Calibration Date:	2-Apr-24	15-Jan-25

Equipement Vertification Result

	Equiperioris Vertification (testing						
Verification			Duration		Results from Calibrated Equipement		Results from Standard Equipment
Test No.	Date	Start-time	End-time	Elapsed Time (in min)	Total Counts	Counts/ Minute x-axis	Dust Concentration (μg/m³) y-axis
1	19/03/2024	7953.66	7956.66	180.00	26640	148	162
2	19/03/2024	7956.66	7959.66	180.00	27360	152	160
3	19/03/2024	7959.66	7962.66	180.00	31860	177	182
4	24/03/2024	7985.12	7988.12	180.00	7200	40	40
5	24/03/2024	7988.12	7991.12	180.00	15354	85	92
6	24/03/2024	7991.12	7994.12	180.00	12834	71	72

Linear Regression of y on x

Intercept: -1.4006 *Correlation Coefficient,R: 0.9978



Operated By: Andy Li Date: 29-03-2024
Project Technician, Environmental

Tandy Tse Date: 29-03-2024
Senior Consultant, Environmental

Checked By:

Slope, K factor:

1.0635



RECALIBRATION DUE DATE:

January 15, 2025

Certificate of Calibration

Calibration Certification Information

Cal. Date: January 15, 2024 Rootsmeter S/N: 438320

5

Ta: 294 Pa: 755.9

8.9

12.9

°K mm Hg

5.50

8.00

Operator: Jim Tisch Calibration Model #:

CH

3

5

Run

TE-5025A

Vol. Init

(m3)

Calibrator S/N: 3465

Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
2	1	1.4350	3.3	2.00
4	1	1.0180	6.4	4.00
6	1	0.9090	8.0	5.00

0.8670

	Data Tabulation						
Vstd	Qstd	$\sqrt{\Delta H(\frac{Pa}{Pstd})(\frac{Tstd}{Ta})}$		Qa	√∆H(Ta/Pa)		
(m3)	(x-axis)	(y-axis)	Va	(x-axis)	(y-axis)		
1.0037	0.6995	1.4200	0.9956	0.6938	0.8820		
0.9996	0.9819	2.0081	0.9915	0.9740	1.2473		
0.9975	1.0973	2.2452	0.9894	1.0885	1.3945		
0.9963	1.1491	2.3547	0.9882	1.1398	1.4626		
0.9909	1.3859	2.8399	0.9829	1.3747	1.7639		
	m=	2.06920		m=	1.29570		
QSTD	b=	-0.02547	QA	b=	-0.01582		
,	r=	0.99999	7 ~~	r=	0.99999		

	Calculation	IS	
Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	Va=	ΔVol((Pa-ΔP)/Pa)
Qstd= Vstd/ΔTime		Qa= Va/ΔTime	
	For subsequent flow rat	e calculatio	ns:
Qstd=	$1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$	Qa=	$1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

	Standard Conditions
Tstd:	298.15 ° _K
Pstd:	760 mm Hg
-	Key
	manometer reading (in H2O)
ΔP: rootsmete	r manometer reading (mm Hg)
	olute temperature (°K)
Pa: actual bar	ometric pressure (mm Hg)
b: intercept	
m: slope	

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30

Tisch Environmental, Inc. 145 South Miami Avenue Village of Cleves, OH 45002

www.tisch-env.com
TOLL FREE: (877)263-7610

FAX: (513)467-9009





Site Information

One information					
Location:	YMT Catholic Primary School	Site ID:	W-A6	Date:	31-May-2024
Serial No:	1084	Model:	TE-5170X	Operator:	Andy Li

Ambient Condition

Actual Pressure during Calibration (P _a) (mm Hg):	Actual Temperature during Calibration (T _a) (deg K):	300.4
---	--	-------

Calibration Orifice

Model:	TE-5025A	Slope (m _c):	2.06920
Serial No.:	3465	Intercept (b _c):	-0.02547
Calibration Due Date:	15-Jan-25	Corr. Coeff:	0.99999

Calibration Data

Plate or	∆H ₂ O	Qa, X-Axis	I, CFM	IC, Y-Axis
Test#	(in)	(m³/min)	(chart)	(corrected)
18	10.30	1.552	61.0	60.56
13	8.50	1.411	58.0	57.58
10	7.20	1.300	55.0	54.60
7	4.30	1.007	45.0	44.67
5	3.30	0.884	40.0	39.71

Sampler Calibtation Relationship (Qa on x-axis, IC on y-axis)

m= 31.6456	b= 12.4757	Corr. Coeff= 0.9954	ļ
------------	------------	---------------------	---

Calculations

Qa = $1/m_c^*[Sqrt (\Delta H_2O^*(P_a/P_{Std})^*(T_{Std}/T_a)) - b_c]$ IC = I*(Sqrt (P_a/P_{Std})^*(T_{Std}/T_a))

 $IC = I^*(Sqrt(P_a/P_{Std})^*(I_{Std}/I_a))$

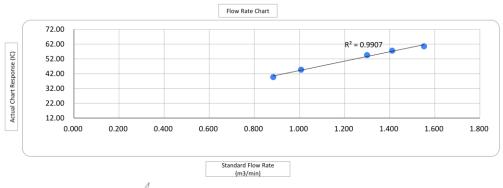
 $\begin{aligned} &Qa = actual \ flow \ rate \\ &IC = corrected \ chart \ response \\ &I = actual \ chart \ response \\ &m_c = calibrator \ slope \end{aligned}$

b_c = calibrator intercept

m = sampler slope b = sampler intercept T_{Std} = 298 deg K P_{Std} = 760 mm Hg

T_a = actual temperature during calibration (deg K)

 P_a = actual pressure during calibration (mm Hg)



Checked by: Date: 31-May-2024





Site Information

Location:	Man Cheong Building	Site ID:	W-A6	Date:	31-May-2024
Serial No:	1050	Model:	TE-5170X	Operator:	Andy Li

Ambient Condition

Actual Pressure during Calibration (Pa)	754.0	Actual Temperature during	200.4
(mm Hg):	754.9	Calibration (T _a) (deg K):	300.4

Calibration Orifice

Model:	TE-5025A	Slope (m _c):	2.06920
Serial No.:	3465	Intercept (b _c):	-0.02547
Calibration Due Date:	15-Jan-25	Corr. Coeff:	0.99999

Calibration Data

Plate or	∆H ₂ O	Qa, X-Axis	I, CFM	IC, Y-Axis
Test #	(in)	(m³/min)	(chart)	(corrected)
18	10.80	1.589	60.0	59.57
13	8.70	1.427	55.0	54.60
10	6.80	1.263	51.0	50.63
7	4.50	1.030	45.0	44.67
5	3.10	0.857	39.0	38.72

Sampler Calibtation Relationship (Qa on x-axis, IC on y-axis)

m=	27.7082	b= 15.4625	Corr. Coeff= 0.9983
----	---------	------------	---------------------

Calculations

 $Qa = 1/m_c*[Sqrt (\Delta H_2O*(P_a/P_{Std})*(T_{Std}/T_a))-b_c]$

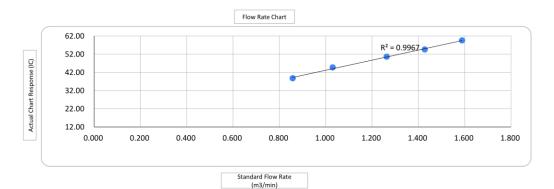
 $IC = I*(Sqrt (P_a/P_{Std})*(T_{Std}/T_a))$

 $\begin{aligned} &Qa = \text{actual flow rate} \\ &IC = \text{corrected chart response} \\ &I = \text{actual chart response} \\ &m_c = \text{calibrator slope} \\ &b_c = \text{calibrator intercept} \end{aligned}$

m = sampler slope b = sampler intercept T_{Std} = 298 deg K

P_{Std} = 760 mm Hg

 T_a = actual temperature during calibration (deg K) P_a = actual pressure during calibration (mm Hg)



Checked by: _____ Date: _____31-May-2024





Site Information

Location:	YMT Catholic Primary School	Site ID:	W-A6	Date:	13-Jun-2024
Serial No:	1084	Model:	TE-5170X	Operator:	Andy Li

Ambient Condition

Actual Pressure during Calibration (P _a)		Actual Temperature during	303.1
(mm Hg):	755.0	Calibration (T _a) (deg K):	555.2

Calibration Orifice

Model:	TE-5025A	Slope (m _c):	2.06920
Serial No.:	3465	Intercept (b _c):	-0.02547
Calibration Due Date:	15-Jan-25	Corr. Coeff:	0.99999

Calibration Data

Plate or	∆H ₂ O	Qa, X-Axis	I, CFM	IC, Y-Axis
Test #	(in)	(m³/min)	(chart)	(corrected)
18	10.60	1.566	61.0	60.23
13	8.10	1.370	56.0	55.30
10	5.90	1.171	49.0	48.38
7	4.00	0.967	43.0	42.46
5	3.00	0.839	40.0	39.50

Sampler Calibtation Relationship (Qa on x-axis, IC on y-axis)

m= 29.3084 b= 14.5116 Corr. Coeff= 0.9984

Calculations

 $\begin{aligned} &\text{Qa} = 1/m_c * [\text{Sqrt} \ (\Delta H_2 O * (P_a/P_{\text{Std}}) * (T_{\text{Std}}/T_a)) - b_c] \\ &\text{IC} = I * (\text{Sqrt} \ (P_a/P_{\text{Std}}) * (T_{\text{Std}}/T_a)) \end{aligned}$

 $IC = I^*(Sqrt(P_a/P_{Std})^*(I_{Std}/I_a))$

 $\begin{aligned} Qa &= \text{actual flow rate} \\ IC &= \text{corrected chart response} \\ I &= \text{actual chart response} \\ m_c &= \text{calibrator slope} \end{aligned}$

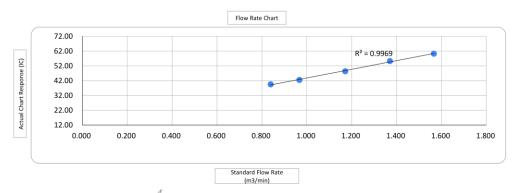
b_c = calibrator intercept

m = sampler slope b = sampler intercept T_{Std} = 298 deg K

 $P_{Std} = 760 \text{ mm Hg}$

T_a = actual temperature during calibration (deg K)

 P_a = actual pressure during calibration (mm Hg)



Checked by: _____ Date: ____13-Jun-2024





Site Information

Location:	Man Cheong Building	Site ID:	W-A6	Date:	13-Jun-2024
Serial No:	1050	Model:	TE-5170X	Operator:	Andy Li

Ambient Condition

Actual Pressure during Calibration (Pa)	752.6	Actual Temperature during	202.1
(mm Hg):	753.6	Calibration (T _a) (deg K):	303.1

Calibration Orifice

Model:	TE-5025A	Slope (m _c):	2.06920
Serial No.:	3465	Intercept (b _c):	-0.02547
Calibration Due Date:	15-Jan-25	Corr. Coeff:	0.99999

Calibration Data

Plate or	∆H ₂ O	Qa, X-Axis	I, CFM	IC, Y-Axis
Test #	(in)	(m³/min)	(chart)	(corrected)
18	10.10	1.529	60.0	59.25
13	8.70	1.420	58.0	57.27
10	6.50	1.229	51.0	50.36
7	4.50	1.025	44.0	43.45
5	3.20	0.866	41.0	40.49

Sampler Calibtation Relationship (Qa on x-axis, IC on y-axis)

m=	30.0133	b=	13.7359	Corr. Coeff=	0.9950
----	---------	----	---------	--------------	--------

Calculations

 $Qa = 1/m_c*[Sqrt (\Delta H_2O*(P_a/P_{Std})*(T_{Std}/T_a))-b_c]$

 $IC = I*(Sqrt (P_a/P_{Std})*(T_{Std}/T_a))$

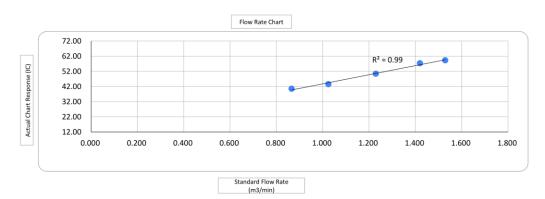
Qa = actual flow rate IC = corrected chart response I = actual chart response m_c = calibrator slope

 b_c = calibrator intercept

m = sampler slope b = sampler intercept $T_{Std} = 298 deg K$ $P_{Std} = 760 mm Hg$

T_a = actual temperature during calibration (deg K)

P_a = actual pressure during calibration (mm Hg)



Checked by: _____ Date: ____13-Jun-2024

Environmental Monitoring & Auditing
A 1' T
Appendix I
1 1
Calibration Certificates (Noise)
Cantilation Certificates (Noise)

Contract No. HY/2014/08

Acuity Sustainability Consulting Ltd.





Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司

Certificate of Calibration

for

Description:

Sound Level Meter

Manufacturer:

NTi Audio

Type No .:

XL2 (Serial No.: A2A-09696-E0)

Microphone:

ACO 7052 (Serial No.:73780)

Preamplifier:

NTi Audio MA220 (Serial No.:6282)

Submitted by:

Customer:

Aurecon Hong Kong Limited

Address:

Unit 1608, 16/F, Tower B,

Manulife Financial Centre,

223-231 Wai Yip Street, Kwun Tong,

Kowloon, Hong Kong.

Upon receipt for calibration, the instrument was found to be:

✓ Within (31.5Hz − 8kHz)

☐ Outside

the allowable tolerance.

The test equipment used for calibration are traceable to National Standards via:

The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory

Date of receipt: 28 February 2024

Date of calibration: 02 March 2024

Date of NEXT calibration: 01 March 2025

Calibration Technician

Certified by:

Mr. Ng Yan Wa Laboratory Manager

Date of issue: 02 March 2024

Certificate No.: APJ23-146-CC003

age 1 of 4

Room 422, Leader Industrial Centre, 57-59 Au Pui Wan Street, Fo Tan, Shatin, N.T., Hong Kong Tel: (852) 2668 3423 Fax:(852) 2668 6946

Homepage: http://www.aa-lab.com E-mail: inquiry@aa-lab.com

(**A+A**)* L Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司

1. Calibration Precaution:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

2. Calibration Conditions:

Air Temperature:22.9 °CAir Pressure:1005 hPaRelative Humidity:61.2 %

3. Calibration Equipment:

	Type	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV220061	HOKLAS

4. Calibration Results

Sound Pressure Level

Reference Sound Pressure Level

Sett	ing of Uni	t-under-t	est (UUT)	Appl	ied value	UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
30-130	dBA	SPL	Fast	94	1000	94.1	±0.4

Linearity

Sett	ing of Uni	t-under-t	est (UUT)	App	lied value	UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
				94		94.1	Ref
30-130	dBA	SPL	Fast	104	1000	104.1	±0.3
				114		114.1	±0.3

Time Weighting

Sett	Setting of Unit-under-test (UUT) Applied value			UUT Reading,	IEC 61672 Class 1		
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
30-130	dBA	SPL	Fast	94	1000	94.1	Ref
30-130	UDA	SPL	Slow	94	1000	94.1	±0.3

Certificate No.: APJ23-146-CC003

A+A)*LPage 2 of 4

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong Tel: (852) 2668 3423 Fax:(852) 2668 6946

Acoustics and Air Testing Laboratory Co. Ltd. 聲學及空氣測試實驗室有限公司



Frequency Response

Linear Response

Sett	Setting of Unit-under-test (UUT)			Appl	ied value	UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
					31.5	94.0	±2.0
	u				63	94.1	±1.5
					125	94.1	±1.5
					250	94.1	±1.4
30-130	dB	SPL	Fast	94	500	94.1	±1.4
					1000	94.1	Ref
					2000	94.4	±1.6
					4000	95.2	±1.6
					8000	94.5	+2.1; -3.1

A-weighting

Setting of Unit-under-test (UUT)			Applied value		UUT Reading,	IEC 61672 Class 1	
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
					31.5	54.6	-39.4 ±2.0
					63	67.9	-26.2 ±1.5
					125	78.0	-16.1 ±1.5
					250	85.4	-8.6 ±1.4
30-130	dBA	SPL	Fast	94	500	90.9	-3.2 ±1.4
					1000	94.1	Ref
					2000	95.6	+1.2 ±1.6
					4000	96.2	+1.0 ±1.6
					8000	93.4	-1.1+2.1; -3.1

C-weighting

Sett	ing of Uni	t-under-t	est (UUT)	Appl	ied value	UUT Reading,	IEC 61672 Class 1
Range, dB	Freq. W	eighting	Time Weighting	Level, dB	Frequency, Hz	dB	Specification, dB
					31.5	91.0	-3.0 ±2.0
					63	93.3	-0.8 ±1.5
					125	93.9	-0.2 ±1.5
		BC SPL	Fast	94	250	94.1	-0.0 ±1.4
30-130	dBC				500	94.2	-0.0 ±1.4
					1000	94.1	Ref
					2000	94.2	-0.2 ±1.6
					4000	94.4	-0.8 ±1.6
					8000	91.5	-3.0 +2.1: -3.1

Certificate No.: APJ23-146-CC003



Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong Tel: (852) 2668 3423 Fax:(852) 2668 6946



5. Calibration Results Applied

The results apply to the particular unit-under-test only. All calibration points are within manufacture's specification as IEC 61672 Class 1.

Uncertainties of Applied Value:

94 dB	31.5 Hz	± 0.10
	63 Hz	± 0.05
	125 Hz	± 0.05
	250 Hz	± 0.05
	500 Hz	± 0.05
	1000 Hz	± 0.05
	2000 Hz	± 0.05
	4000 Hz	± 0.05
	8000 Hz	± 0.10
104 dB	1000 Hz	± 0.05
114 dB	1000 Hz	± 0.05

The uncertainties are evaluated for a 95% confidence level.

Note:

The values given in this certification only related to the values measured at the time of the calibration and any uncertainties quoted will not allow for the equipment long-term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the calibration. (A+A)*L shall not be liable for any loss or damage resulting from the use of the equipment.

Certificate No.: APJ23-146-CC003



Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail: inquiry@aa-lab.com



Certificate of Calibration

for

Description:	Sound Level	Calibrator
--------------	-------------	------------

Manufacturer: RION
Type No.: NC-75
Serial No.: 34724244

Submitted by:

Customer: Acuity Sustainability Consulting Limited

Address: Unit E, 12/F, Ford Glory Plaza,

Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon,

Hong Kong

Upon receipt for calibration, the instrument was found to be:
☑ Within ☐ Outside
the allowable tolerance.
The test equipments used for calibration are traceable to National Standards via: - The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
Date of receipt: 27 July 2023
Date of calibration: 3 August 2023
Date of NEXT calibration: 2 August 2024
Calibrated by: Calibration Technician Certified by: Mr. Ng Yan Wa Laboratory Manager Date of issue: 3 August 2023

Page 1 of 2

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong
Tel: (852) 2668 3423 Fax:(852) 2668 6946
Homepage: http://www.aa-lab.com E-mail: inquiry@aa-lab.com

Certificate No.: APJ23-049-CC004



1. Calibration Precautions:

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 24 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.

2. Calibration Specifications:

Calibration check

3. Calibration Conditions:

Air Temperature:	22.6 °C
Air Pressure:	1006 hP
Relative Humidity:	52.9 %

4. Calibration Equipment:

Test Equipment	Туре	Serial No.	Calibration Report Number	Traceable to
Multifunction Calibrator	B&K 4226	2288467	AV220061	HOKLAS
Sound Level Meter	RION NA-28	30721812	AV220120	HOKLAS

5. Calibration Results

5.1 Sound Pressure Level

Nominal value	Accept lower level dB	Accept upper level	Measured value
dB		dB	dB
94.0	93.6	94.4	94.0

Note:

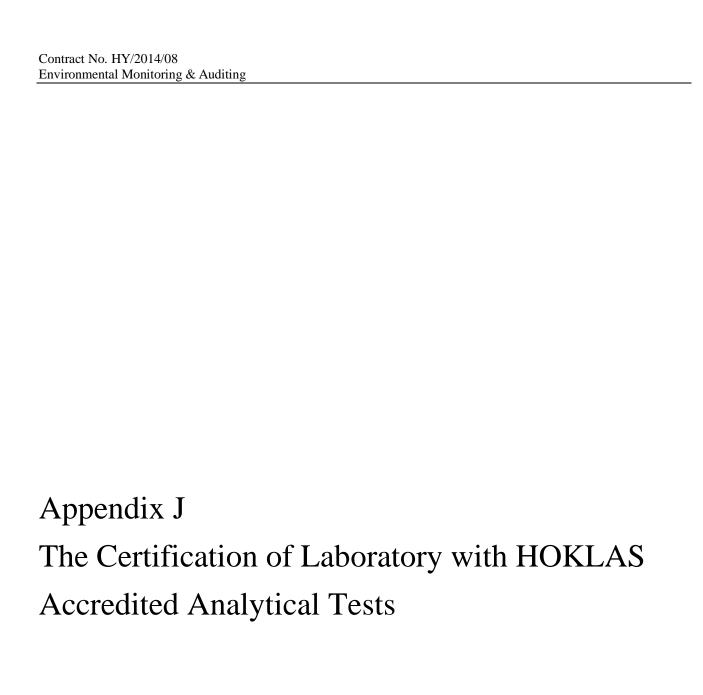
The values given in this certification only related to the values measured at the time of the calibration.



Page 2 of 2

Certificate No.: APJ23-049-CC004

Room 422,Leader Industrial Centre,57-59 Au Pui Wan Street ,Fo Tan, Shatin,N.T.,Hong Kong Tel: (852) 2668 3423 Fax:(852) 2668 6946





Hong Kong Accreditation Service 香港認可處

Certificate of Accreditation 認可證書

This is to certify that 特此證明

ACUMEN LABORATORY AND TESTING LIMITED

浩科檢測中心有限公司

Flat/Rm D, 12/F, Ford Glory Plaza, Nos. 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong

香港九龍長沙灣永康街37-39號福源廣場12樓D室

is accredited by the Hong Kong Accreditation Service (HKAS) to ISO/IEC 17025:2017 for performing specific laboratory activities as listed in the scope of accreditation within the test category of 獲香港認可處根據ISO/IEC 17025:2017認可 進行戰於認可範圍內下述測試類別中的指定實驗所活動

Environmental Testing

環境測試

This accreditation to ISO/IEC 17025:2017 demonstrates technical competence for a defined scope and the implementation of a management system relevant to laboratory operation (see joint IAF-ILAC-ISO Communiqué).

此项 ISO/IEC 17025:2017 的認可資格證明此實驗所具備指定範疇內所須的技術能力並 實施一套與實驗所運作相關的管理關系 (見國際認可結婚・國際實驗所認可合作組織及國際標準化組織的聯合公報)。

The common seal of HKAS is affixed hereto by the authority of the HKAS Executive 現經香港認可處執行機關授權在此蓋上香港認可處的印章

SHUM Wai-leung, Executive Administrator

執行幹事 沈偉良

Issue Date: 15 November 2021

簽發日期:二零二一年十一月十五日

Registration Number : HOKLAS 241

Date of First Registration: 16 July 2014 首次註冊日期:二零一四年七月十六日

This certificate is issued subject to the terms and conditions laid down by HKAS 本體書級照香港認可盡訂立的條款及條件發出

L002316



Hong Kong Accreditation Service 香港認可處

Certificate of Accreditation

認可證書

This is to certify that 特此間明

ALS TECHNICHEM (HK) PTY LIMITED

11/F, Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, New Territories, Hong Kong 香港新界葵涌永業街1-3號忠信針織中心11樓

is accredited by the Hong Kong Accreditation Service (HKAS) to ISO/IEC 17025:2017 for performing specific laboratory activities as listed in the scope of accreditation within the test category of 獲香港認可處根據ISO/IEC 17025:2017認可 進行戰於認可範圍內下述測試類別中的指定實驗所活動

Environmental Testing

環境測試

This accreditation to ISO/IEC 17025:2017 demonstrates technical competence for a defined scope and the implementation of a management system relevant to isboratory operation (see joint IAF-ILAC-ISO Communiqué).

此項 ISO/IEC 17025:2017 的認可資格證明此實驗所具備指定範疇內所須的技術能力並 實施一套與實驗所運作相關的管理體系 (見國際認可論壇、國際實驗所認可合作組織及國際標準化組織的聯合公報)。

The common seal of HKAS is affixed hereto by the authority of the HKAS Executive 現經香港認可處執行機關授權在此蓋上香港認可處的印章

SHUM Wai-leung, Executive Administrator

執行幹事 沈偉良

Issue Date : 28 February 2020

签發日期:二零二零年二月二十八日

註冊號碼:

Registration Number : HOKLAS 066



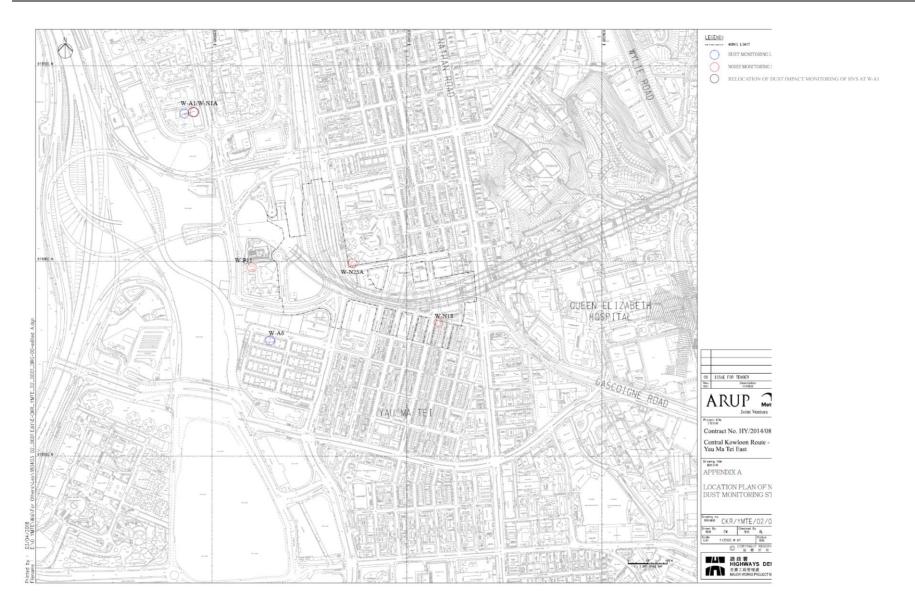
Date of First Registration: 15 September 1995 首次註冊日期:一九九五年九月十五日

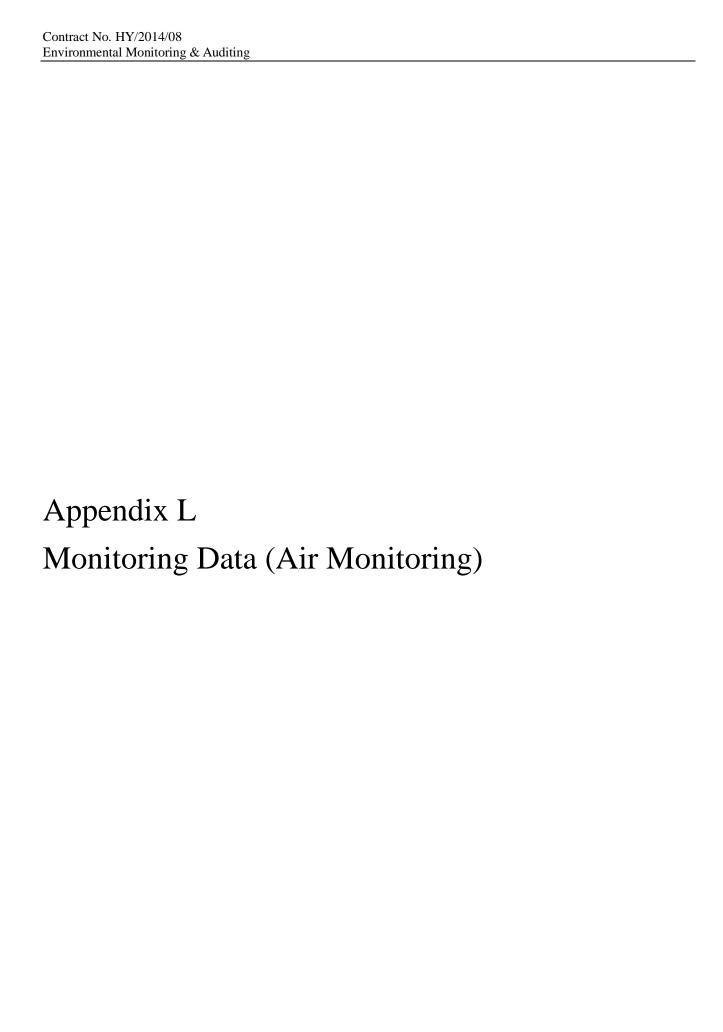
This certificate is issued subject to the terms and conditions laid down by HKAS. 本證書按照香港認可處訂立的條款及條件發出

L001934

Contract No. HY/2014/08
Environmental Monitoring & Auditing

Appendix K
Location Plan of Noise and Air Quality
Monitoring Station





Location: Yau Ma Tei Catholic Primary School (Hoi Wang Road) (W-A1)

Monitoring date: 4, 8, 14, 20 and 26 June 2024

Parameter: TSP 1-hour Other Factors: Nearby traffic

	1-hour TSP (μg/m³)										
Date	Weather	Start Time	1 st Hour (μg/m ³)	2 nd Hour (μg/m ³)	3 rd Hour (μg/m ³)						
04/06/2024	Fine	9:10	54	58	53						
08/06/2024	Fine	Fine 11:26 45		48	44						
14/06/2024	Fine	Fine 11:31 5		49	54						
20/06/2024	Fine	11:35	58	52	57						
26/06/2024	26/06/2024 Fine		47	45	50						
Mini	imum: 44 μg/m ²	3		Maximum: 58 μg/m ³							

Location: Man Cheong Building (W-A6) Monitoring date: 4, 8, 14, 20 and 26 June 2024

Parameter: TSP 1-hour Other Factors Nearby traffic

	1-hour TSP (μg/m³)										
Date	Weather	Start Time		st Hour μg/m³)	2 nd Hour (μg/m ³)	3 rd Hour (μg/m³)					
04/06/2024	Fine	10:20		42	55	54					
08/06/2024	Fine	9:12		52 46		46					
14/06/2024	Fine	9:16		54	51	52					
20/06/2024	Fine	9:20		46	49	56					
26/06/2024	Fine	9:18		55	43	55					
]	Minimum: 42	ug/m ³		Maximum: 56 μ	g/m^3						

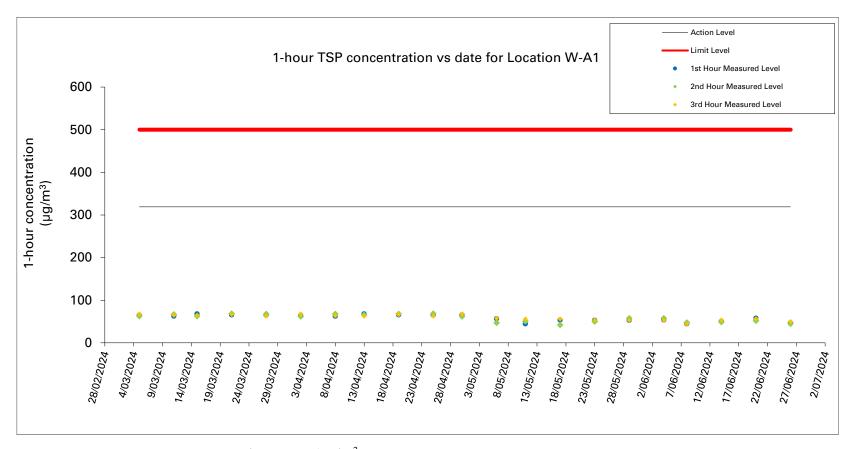


Figure 1: Graphical Illustration of Measured 1-hour TSP (μg/m³) Levels at W-A1

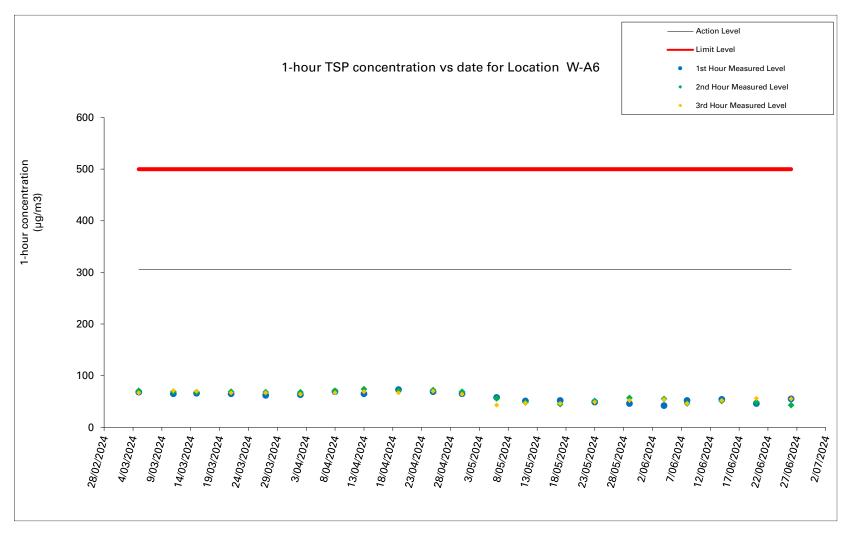


Figure 2: Graphical Illustration of Measured 1-hour TSP (μg/m³) Levels at W-A6

Location: Yau Ma Tei Catholic Primary School (Hoi Wang Road) (W-A1)

Monitoring date: 1, 4, 8, 14, 20 and 26 June 2024

Parameter: TSP 24-hour Other Factors Nearby traffic

Date of Calibration:	31-May-24	Slope =	31.6456
Calibration due date:	15-Jun-24	Intercept =	12.4757
Date of Calibration:	13-Jun-24	Slope =	29.3084
Calibration due date:	28-Jun-24	Intercept =	14.5116

Start Date Weather Condition		Elapse Time			Chart Reading			Avg Air Temp	Avg Atmospheric Pressure	Flow Rate	Standard Air Volume	Filter Weight (g)		Particulate weight	Corr.
	Condition	Initial	Final	Actual (min)	Min	Max	Avg	(°C)	(hPa)	(m³/min)	(m ³)	Initial	Final	(g)	$(\mu g/m^3)$
1/06/2024	Fine	8922.4	8946.4	1440.0	41	41	41.0	27.6	1007.6	0.89	1280	2.7199	2.7631	0.0432	34
4/06/2024	Fine	8946.4	8970.4	1440.0	41	41	41.0	24.8	1010.1	0.90	1293	2.7376	2.8208	0.0832	64
8/06/2024	Fine	8970.4	8994.4	1440.0	41	41	41.0	26.5	1007.6	0.89	1285	2.6997	2.7552	0.0555	43
14/06/2024	Fine	8994.4	9018.4	1440.0	40	40	40.0	29.0	1004.4	0.85	1222	2.7264	2.7704	0.0440	36
20/06/2024	Fine	9018.4	9042.4	1440.0	40	40	40.0	30.4	1005.8	0.85	1220	2.7249	2.7790	0.0541	44
26/06/2024	Fine	9042.4	9066.4	1440.0	41	41	41.0	30.6	1011.1	0.89	1279	2.7301	2.7955	0.0654	51
								Maximum:	64	μg/m ³	Minimum:	34	$\mu g/m^3$		

Remark: Due to equipment malfunction, the 24-hour air quality impact monitoring at W-A1 on 29/05/2024 has been rescheduled to 01/06/2024.

Location: Man Cheong Building (W-A6)
Monitoring date: 4, 8, 14, 20 and 26 June 2024

Parameter: TSP 24-hour Other Factors Nearby traffic

Da	te of Calibration:	31-May-24	Slope =	27.7082
Calib	oration due date:	15-Jun-24	Intercept =	15.4625
Da	te of Calibration:	13-Jun-24	Slope =	30.0133
Calib	oration due date:	28-Jun-24	Intercept =	13.7359

															1
Start Date Weather Condition		Elapse Time			Chart Reading			Avg Air Temp	Atmospheric		Flow Rate Standard Air Volume		Filter Weight (g)		Conc.
	Condition	Initial	Final	Actual (min)	Min	Max	Avg	(°C)	(hPa)	(m³/min)	(m ³)	Initial	Final	(g)	(μg/m ³)
4/06/2024	Fine	11422.4	11446.4	1440.00	40	40	40.0	27.5	1012.7	0.88	1266	2.7293	2.7992	0.0699	55
8/06/2024	Fine	11446.4	11470.4	1440.00	40	40	40.0	26.9	1012.7	0.88	1267	2.6628	2.7091	0.0463	37
14/06/2024	Fine	11470.4	11494.4	1440.00	40	40	40.0	26.1	1011.1	0.87	1252	2.7118	2.7547	0.0429	34
20/06/2024	Fine	11494.4	11518.4	1440.00	41	41	41.0	25.6	1009.7	0.90	1299	2.6905	2.7314	0.0409	31
26/06/2024	Fine	11518.4	11542.4	1440.00	40	40	40.0	25.7	1005.9	0.86	1244	2.7117	2.7526	0.0409	33
		M						Maximum:	55	μg/m ³	Minimum:	31	μg/m ³		

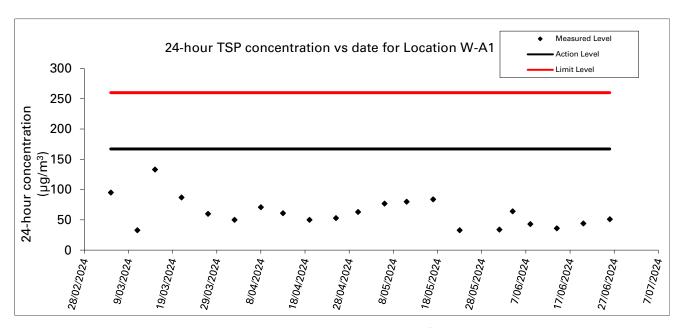


Figure 3: Graphical Illustration of Measured 24-hour TSP (μg/m³) Levels at W-A1

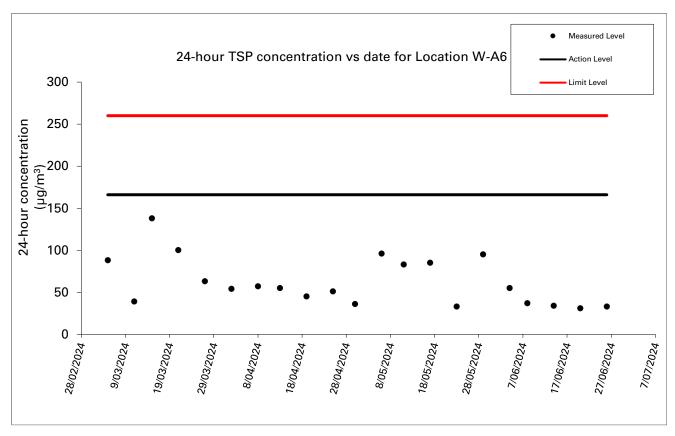
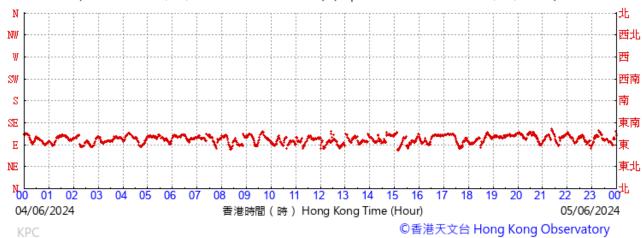


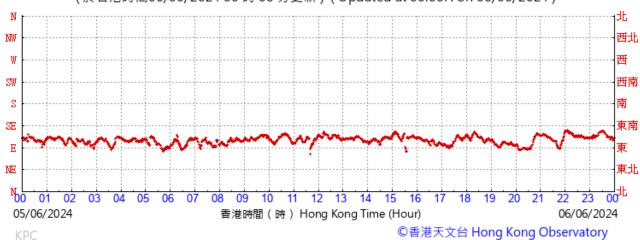
Figure 4: Graphical Illustration of Measured 24-hour TSP (µg/m³) Levels at W-A6

Wind direction data for 4, 5, 8, 9, 14, 15, 20, 21, 26 and 27 June 2024

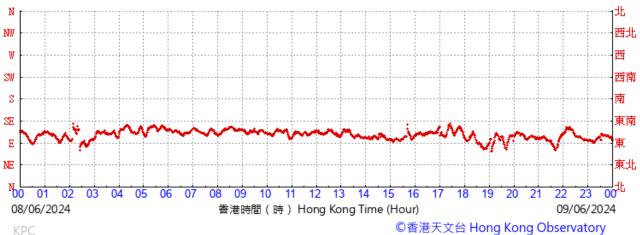


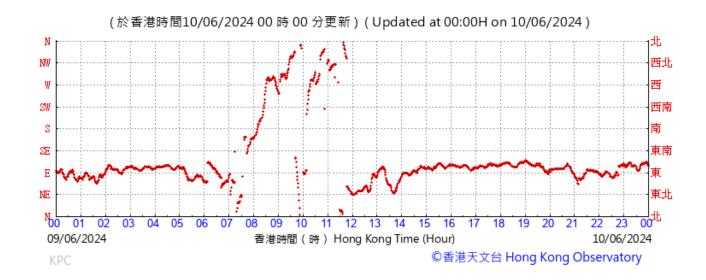


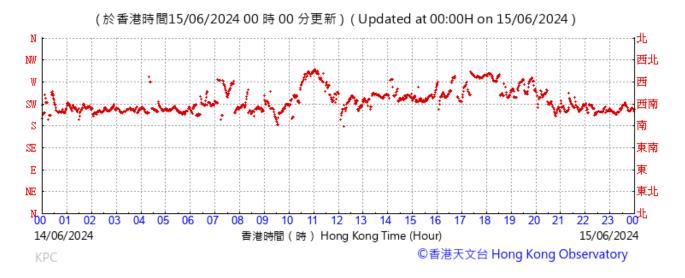
(於香港時間06/06/2024 00 時 00 分更新) (Updated at 00:00H on 06/06/2024)

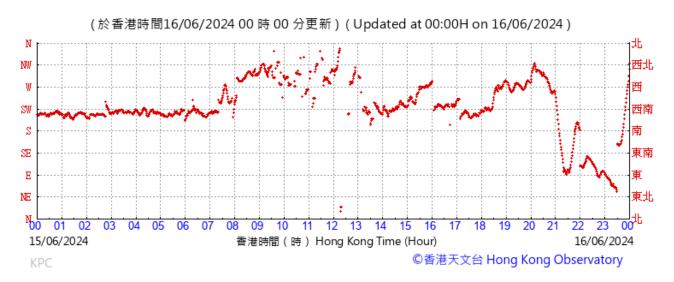


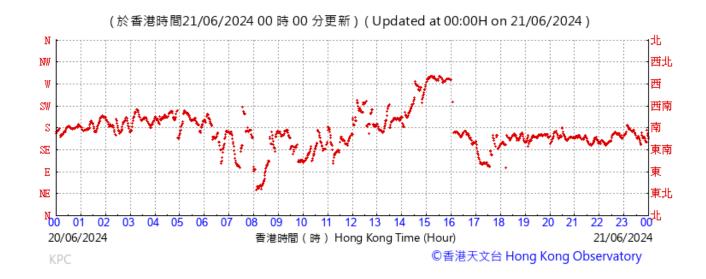


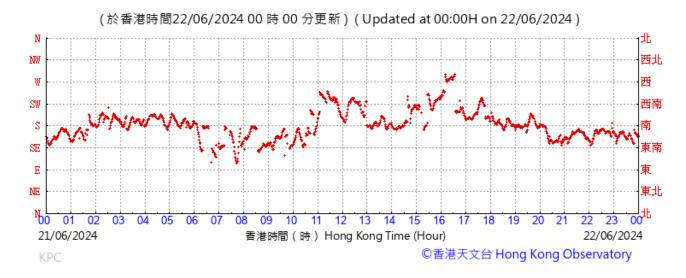


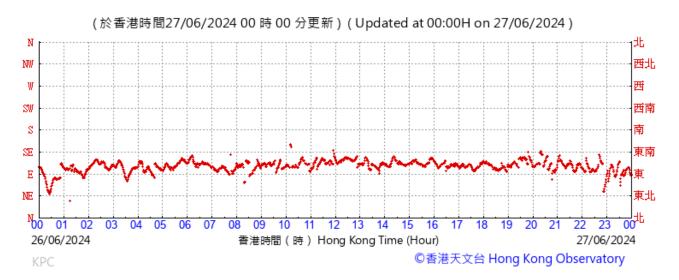


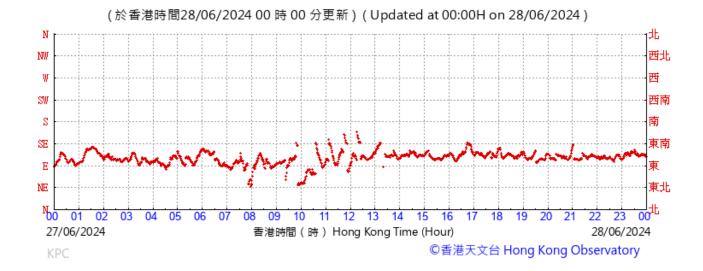






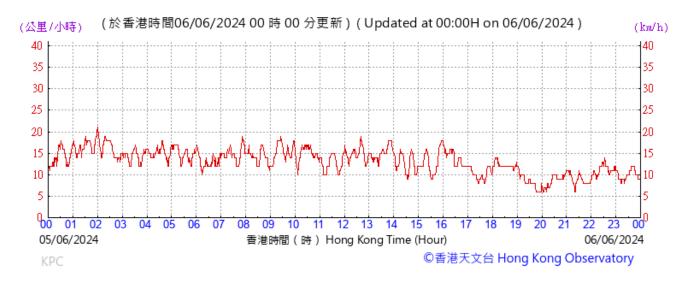


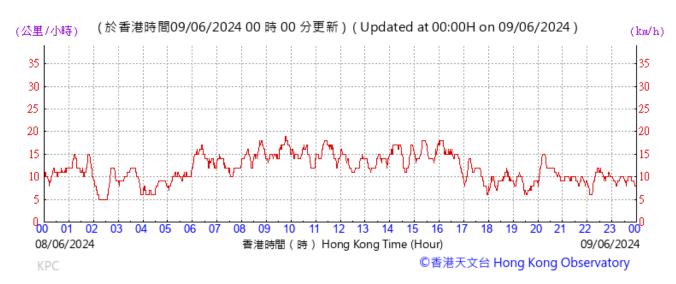


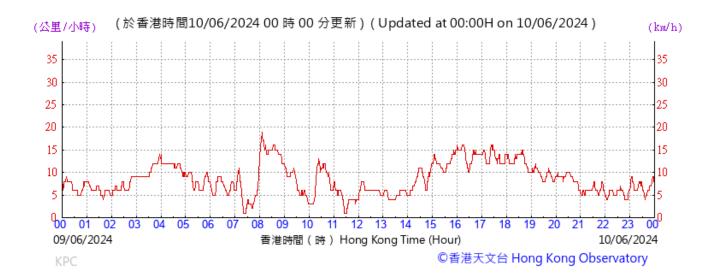


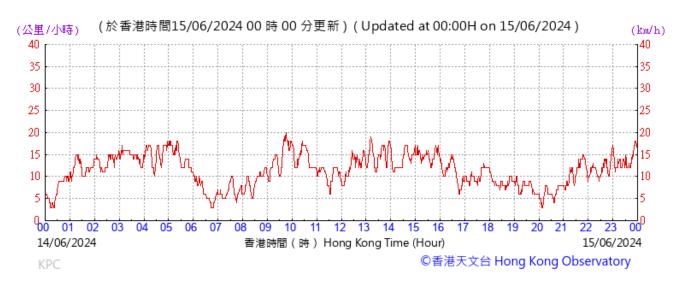
Wind speed data for 4, 5, 8, 9, 14, 15, 20, 21, 26 and 27 June 2024





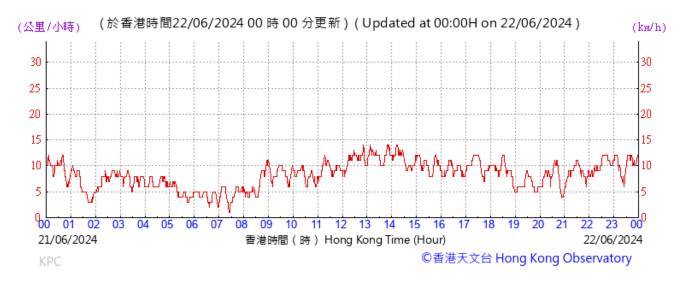


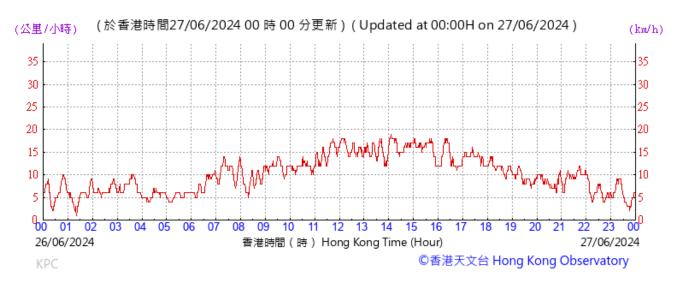


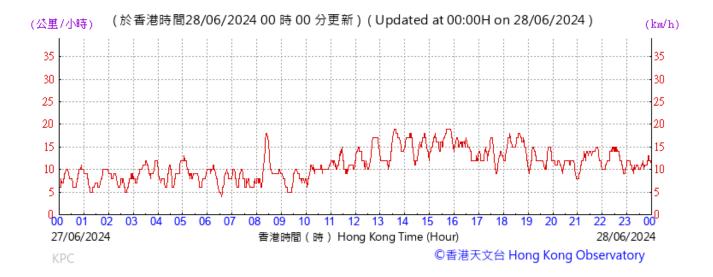












Contract No. HY/2014/08
Environmental Monitoring & Auditing

Appendix M Monitoring Data (Noise) Location: Yau Ma Tei Catholic Primary School (Hoi Wang Road) (W-N1A)

Monitoring date: 4, 8, 14, 20 and 26 June 2024

 $\begin{array}{ll} \text{Parameter:} & L_{\text{eq}},\,L_{10},\,L_{90} \\ \text{Other Factors} & \text{Nearby traffic} \end{array}$

Date	Weather	Start Time	-	End Time	L_{eq}	L_{10}	L ₉₀	Wind speed (m/s)
04/06/2024	Fine	9:10	-	9:40	64.5	70.8	58.9	4.7
08/06/2024	Fine	11:26	-	11:56	64.8	71.0	58.7	4.4
14/06/2024	Fine	11:31	-	12:01	65.0	70.7	59.4	2.8
20/06/2024	Fine	11:35	-	12:05	64.8	70.7	59.9	2.2
26/06/2024	Fine	11:34	-	12:04	64.6	71.4	60.0	3.9

Remark: 1. Examination was scheduled at Yau Ma Tei Catholic Primary School from 5 June 2024 to 13 June 2024. The limit level of W-N1A would be 65 dB(A) on 8 June 2024.

Location: Hydan Place (W-N18)

Monitoring date: 4, 8, 14, 20 and 26 June 2024

 $\begin{array}{ll} Parameter: & L_{eq}, L_{10}, \, L_{90} \\ Other \ Factors & Nearby \ traffic \end{array}$

Date	Weather	Start Time	-	End Time	L_{eq}	L_{10}	L ₉₀	Wind speed (m/s)
04/06/2024	Fine	12:06	-	12:36	69.4	73.5	59.7	4.2
08/06/2024	Fine	9:46	-	10:16	69.5	72.6	59.7	4.6
14/06/2024	Fine	9:51	-	10:21	69.3	72.6	60.3	4.4
20/06/2024	Fine	9:55	-	10:25	68.4	73.3	59.4	1.9
26/06/2024	Fine	9:56	-	10:26	69.0	73.4	60.0	3.3

Location: Prosperous Garden Block 1 (W-N25A)

Monitoring date: 4, 8, 14, 20 and 26 June 2024

 $\begin{array}{ll} Parameter: & L_{eq}, L_{10}, \, L_{90} \\ Other \ Factors & Nearby \ traffic \end{array}$

Date	Weather	Start Time	-	End Time	L_{eq}	L_{10}	L ₉₀	Wind speed (m/s)
04/06/2024	Fine	11:06	-	11:36	68.2	72.6	63.4	4.4
08/06/2024	Fine	10:22	-	10:52	69.0	72.5	62.9	3.9
14/06/2024	Fine	10:27	-	10:57	68.5	72.5	63.3	3.8
20/06/2024	Fine	10:33	-	11:03	68.0	72.6	63.3	2.1
26/06/2024	Fine	10:36	-	11:06	68.8	72.7	62.6	3.6

Location: The Coronation Tower 1 (W-P11)

Monitoring date: 4, 8, 14, 20 and 26 June 2024

 $\begin{array}{ll} Parameter: & L_{eq}, L_{10}, L_{90} \\ Other \ Factors & Nearby \ traffic \end{array}$

Date	Weather	Start Time	-	End Time	L_{eq}	L_{10}	L ₉₀	Wind speed (m/s)
04/06/2024	Fine	10:02	-	10:32	65.4	68.7	62.6	4.6
08/06/2024	Fine	11:05	-	11:15	64.6	68.6	62.3	4.6
14/06/2024	Fine	11:12	-	11:42	65.3	68.8	62.5	2.5
20/06/2024	Fine	11:16	-	13:30	64.8	68.6	62.1	2.3
26/06/2024	Fine	11:20	-	11:50	64.7	68.9	62.3	3.9

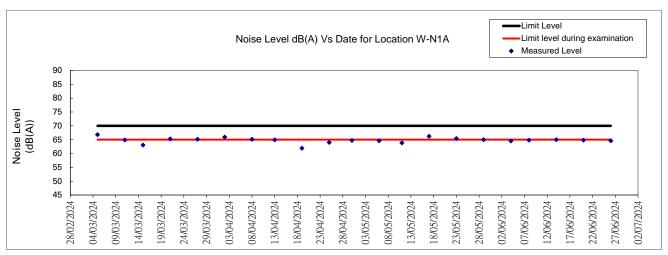


Figure 1: Graphical Illustration of Measured Noise Levels at W-N1A

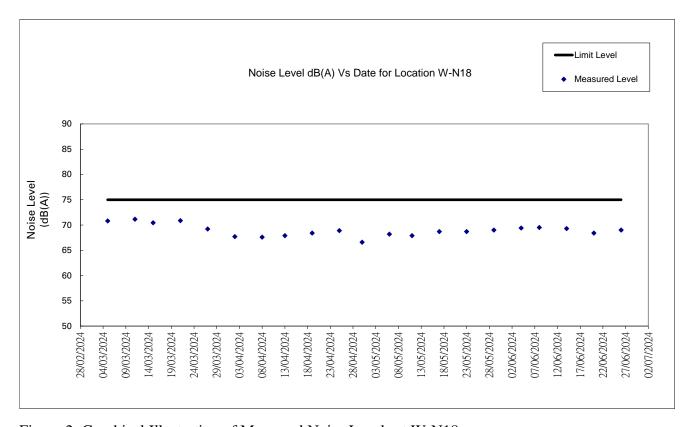


Figure 2: Graphical Illustration of Measured Noise Levels at W-N18

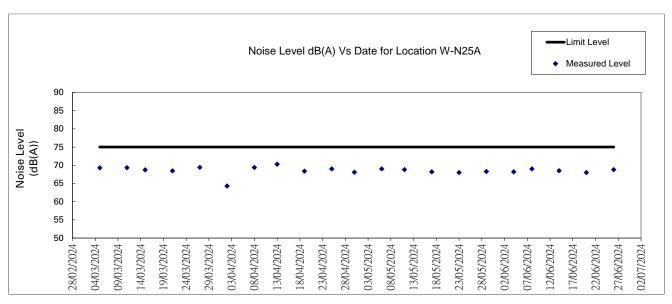


Figure 3: Graphical Illustration of Measured Noise Levels at W-N25A

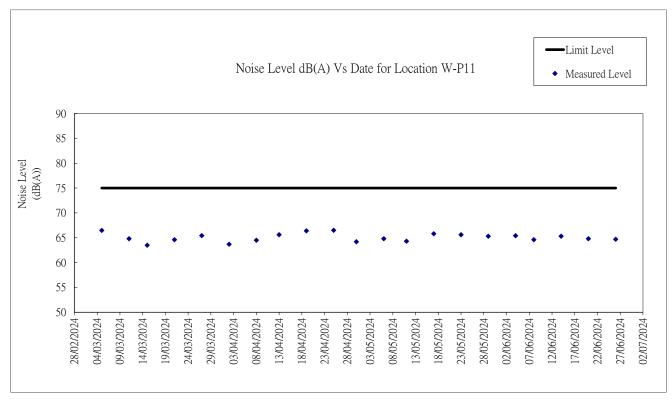


Figure 4: Graphical Illustration of Measured Noise Levels at W-P11

Contract No. HY/2014/08
Environmental Monitoring & Auditing

Appendix N Waste Flow Table

Monthly Summary Waste Flow Table

Name of Department: Highways Department

Contract No. / Works Order No.: __HY/2014/08_

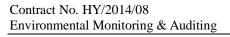
Monthly Summary Waste Flow Table for <u>June 2024</u>

[to be submitted not later than the 15th day of each month following reporting month] (All quantities shall be rounded off to 1 decimal place.)

	·	Acti	ual Quantities of <u>Inc</u>	ert Construction Wa	ste Generated Mon	thly
Month	(a)=(b)+(c)+(d)+(e)+ (f)+ (g)+ (h)+ (i)+ (j)+ (k) Total Quantity Generated	(b) Hard Rock and Large Broken	(c) Reused in the Contract	(d) Reused in other Projects	(e) Disposed of as Public Fill	(f) Imported Fill
	(in 'tonnes)	(in 'tonnes)	(in 'tonnes)	(in 'tonnes)	(in 'tonnes)	(in 'tonnes)
Jan-24	54982.02	4339.70	0.00	0.00	13111.20	0.00
Feb-24	28009.80	4020.70	0.00	0.00	14832.80	0.00
Mar-24	47838.81	3144.90	0.00	0.00	13330.40	0.00
Apr-24	17008.50	2830.20	0.00	0.00	13911.00	0.00
May-24	19360.20	2878.20	0.00	3240.80	13108.80	0.00
Jun-24	21280.11	5984.70	0.00	1090.00	14042.80	0.00
Sub-total	188479.44	23198.40	0.00	4330.80	82337.00	0.00
Jul-24	0.00					
Aug-24	0.00					
Sep-24	0.00					
Oct-24	0.00					
Nov-24	0.00					
Dec-24	0.00					
Total	188479.44	23198.40	0.00	4330.80	82337.00	0.00
2018	51057.90	0.00	0.00	0.00	47715.60	2877.40
2019	112830.10	541.00	1523.80	13525.00	93132.90	3155.60
2020	193021.92	58778.00	1205.60	19108.60	112556.80	0.00
2021	104679.02	6461.30	1393.70	1144.70	92950.20	1542.90
2022	114787.22	3600.50	1804.50	18471.20	90202.70	0.00
2023	192946.67	73219.70	1670.00	20008.60	96991.50	0.00
Accumulated Total	957802.27	165798.90	7597.60	76588.90	615886.70	7575.90

			Actual	Quantities	of <u>Non-inert</u> (Construction	Waste Gene	rated Month	nly
Month		g) tals	(h) Paper/ cardboard packaging (i) Plastics Chemical Waste					(k) Others, e.g. General Refuse disposed at Landfill	
	(in '0	00kg)	(in '00	00kg)	(in '0()0kg)	(in '0	00kg)	(in 'tonnes)
	generated	recycled	generated	recycled	generated	recycled	generated	recycled	generated
Jan-24	0.00	37410.00	0.00	0.70	0.00	0.02	0.00	0.00	120.40
Feb-24	0.00	8990.00	0.00	1.00	0.00	0.00	0.00	0.00	165.30
Mar-24	0.00	31240.00	0.00	0.597	0.00	0.01	0.00	0.00	122.90
Apr-24	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	267.10
May-24	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	131.90
Jun-24	0.00	0.00	0.00	0.50	0.00	0.01	0.00	0.00	162.10
Sub-total	0.00	77640.00	0.00	3.50	0.00	0.04	0.00	0.00	969.70
Jul-24									
Aug-24									
Sep-24									
Oct-24									
Nov-24									
Dec-24									
Total	0.00	77640.00	0.00	3.50	0.00	0.040	0.00	0.00	969.70
2018	28.40	0.00	0.00	0.00	0.00	0.00	2.00	0.00	434.50
2019	0.00	9.10	3.40	6.80	0.00	0.00	5.20	0.00	927.30
2020	69.20	0.00	3.30	0.00	0.02	0.00	25.30	0.00	1275.10
2021	30.20	0.00	4.80	0.00	0.02	0.00	25.50	0.00	1125.70
2022	108.60	0.00	3.30	0.40	0.02	0.00	1.20	0.00	594.80
2023	0.00	65.70	0.00	2.71	0.00	0.06	0.00	0.00	988.40
Accumulated Total	236.40	77714.80	14.80	13.41	0.06	0.10	59.20	0.00	6315.50

Remark: Construction waste records from Jan 2024 to May 2024 had been updated



Appendix O
Statistics on Complaint, Notifications of
Summons and Successful Prosecutions

Statistical Summary of Exceedances

	Air Quality						
Reporting Period	Action Level	Limit Level					
1 – 30 June 2024	0	0					
Noise							
Reporting Period	Action Level	Limit Level					
1 – 30 June 2024	2	0					

Statistical Summary of Environmental Complaints

Donauting David	Environmental Complaint Statistics					
Reporting Period	Frequency	Cumulative	Complaint Nature			
1 – 30 June 2024	2	134	Noise nuisance			

Statistical Summary of Environmental Non-compliance

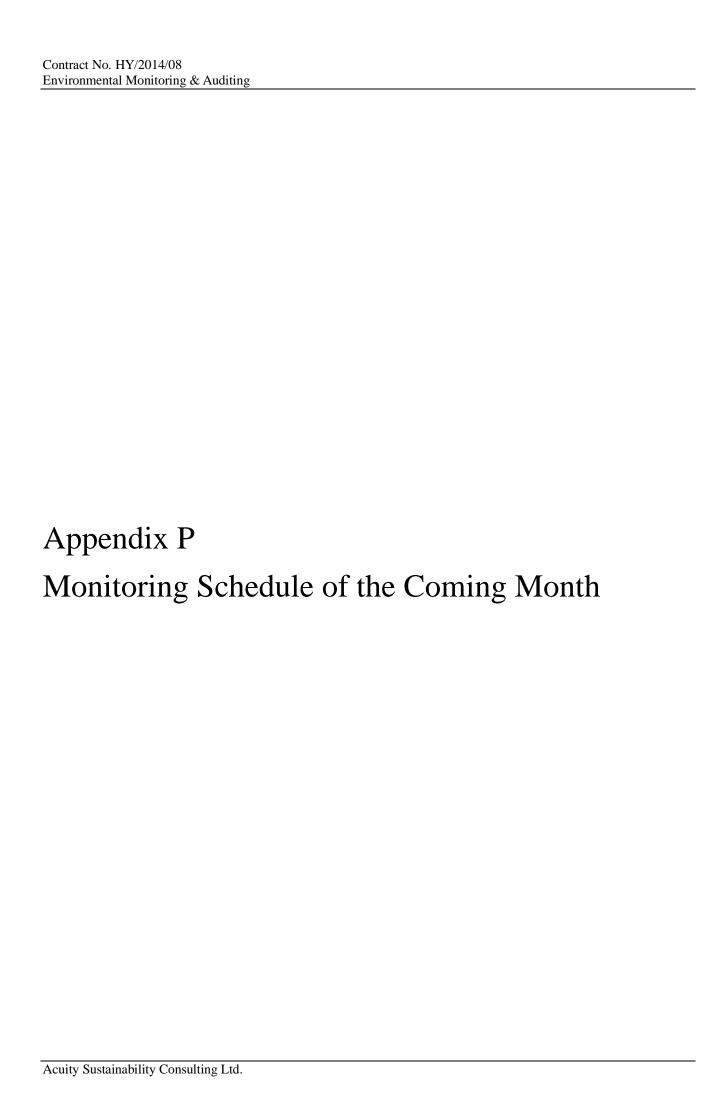
Donauting David	Environmental Non-compliance Statistics						
Reporting Period	Frequency	Cumulative	Details				
1 – 30 June 2024	0	2	N/A				

Statistical Summary of Environmental Summons

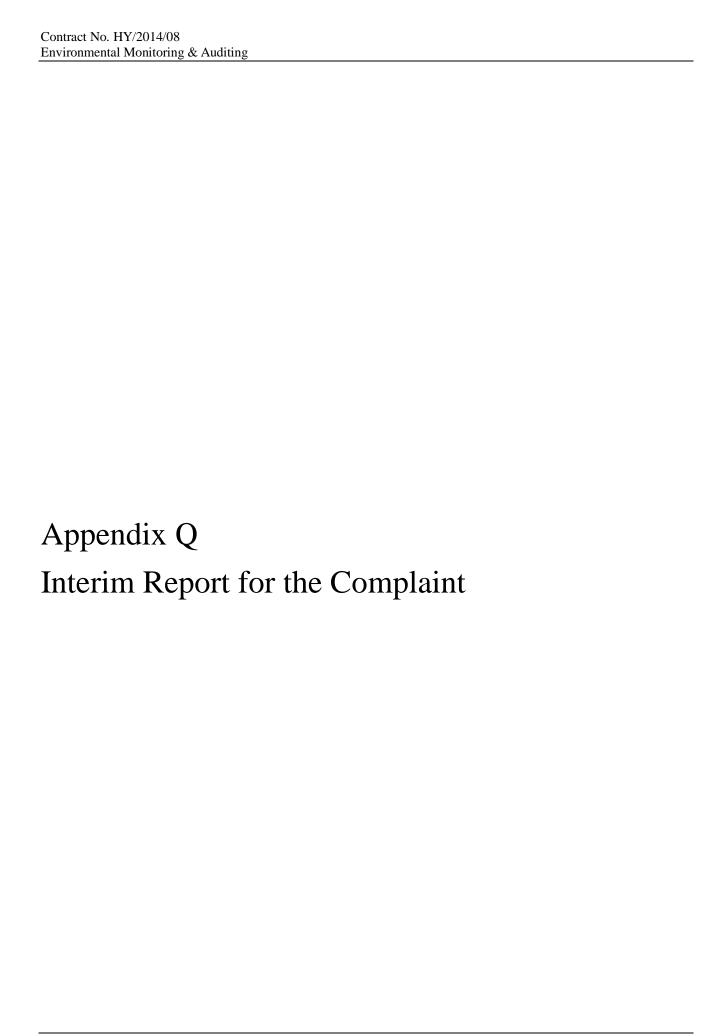
Donarting Daried	Environmental Summons Statistics					
Reporting Period	Frequency	Cumulative	Details			
1 – 30 June 2024	0	1	N/A			

Statistical Summary of Environmental Prosecution

Donouting Donied]	Environmental Prosecution Sta	atistics
Reporting Period	Frequency Cumulative Details		Details
1 – 30 June 2024	0	0	N/A



	Impact Monitoring Schedule for YMTE					
	Jul-24					
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
		Impact Air monitoring for W-A Noise monitoring for ' W-P11,W-N18 & W-	W-N1A, N25A			Impact Air monitoring for W-A6 &W-A1 Noise monitoring for W-N1A, W-P11,W-N18 & W-N25A
7	8	9	10	11	12	13
					Impact Air monitoring for Noise monitoring W-P11,W-N18 8	W-A6 &W-A1 for W-N1A,
14	15	16	17	18	19	20
				Impa Air monitoring fo Noise monitorin W-P11,W-N18	r W-A6 &W-A1 g for W-N1A, & W-N25A	
21	22	23	24	25	26	27
			Imp: Air monitoring fo Noise monitorin W-P11,W-N18	r W-A6 &W-A1 ng for W-N1A,		
28	29	Impact Air monitoring for W-A Noise monitoring for W-P11,W-N18 & W-	W-N1A,			

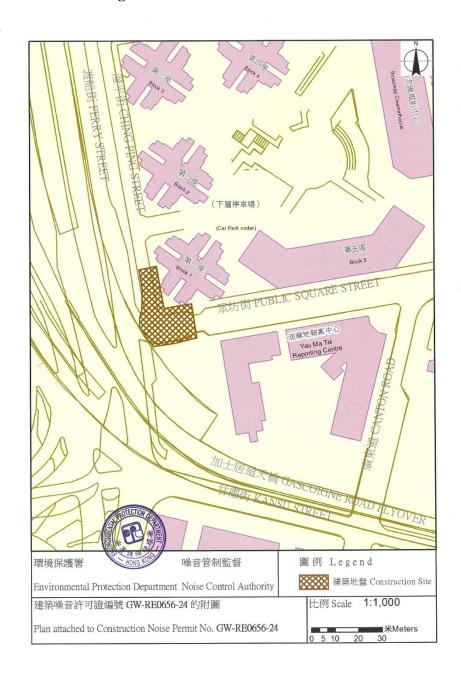


Interim Report on Environmental Complaint

Project	Central Kowloon Route, Yau Ma Tei East Section			
Complaint Code	EC133-CKRYMTE20240614_001			
Complaint description	The complainant was received on 14 Jun 2024, about construction noise from the site			
	area at 2220 on 13 Jun 2024.			
Parameter	Construction Noise			
Investigation finding	The complaint was received on 14 Jun 2024, about construction noise from the site area at 2220 on 13 Jun 2024.			
	For construction works undertaken within restricted hours, the Contractor applied for valid Construction Noise Permits (CNP) (Permit No: GW-RE0656-24) which was granted from EPD, effective from 05 Jun 2024 to 31 Aug 2024, with coverage of the construction site at the concerned area ¹ . According to contractor's information, erection of mega column of noise enclosure at the junction between Ching Ping Street and Public Square Street was carried out from 2200 on 13 Jun 2024 to 0230 on 14 Jun 2024. The PMEs used include the following:			
	PME(s) Group	PME(s)		
	A	1 lorry with flashing directional sign 4 lorries with crane		
	B 1 mobile crane 1 tractor with trailer			
	С	1 cherry picker		
	used for more than six permitted time periods during the validity period of the CNP. The mobile crane was with QPME label showing SWL of $\leq 107 dB(A)$. All idling PMEs were switched off as per requirement of the CNP. Advance Notification has been made to EPD via the online system ² within 14 days but not less than 48 hours before commencement of work. No violation and non-compliance of CNP was observed or recorded. The Contractor had followed the requirements as stipulated in CNP.			
A stigge tology / to be tology	Considering the fulfillment of stipulated requirements by the Contractor for EM&A manual, and the granted CNP, it is concluded that there was no non-compliance of the Project regarding noise quality impact from construction site.			
Actions taken / to be taken	The Contractor had followed EM&A Manual and the granted CNP strictly to implement mitigation measures in order to minimize nuisance to the public.			
	 In view of public concerns, the following additional remedial measures are taken: Carry out site inspection to ensure all PMEs are well-maintained and in proper function to avoid excessive noise; 			
	 Provide training to workers of using PME carefully to minimize noise; Reschedule the operation time of the noisy equipment to less sensitive hours if possible; and 			
	• The Contractor is reminded to consider the use of temporary movable noise barrier when feasible and applicable.			
Remarks	1. Working Zone of CNP GW-RE0656-24			
(Shown in next page)	2. Advance Notification to EPD via online system			

Prepared by ET (Acuity Sustainability Consulting Limited)	Kako Ho	Ho
Reviewed by ETL (Acuity Sustainability Consulting Limited)	Kevin Li	K;
Verified by IEC (ERM-Hong Kong, Limited)	Mandy To	Mandy 2.
Date	17 June 20	024

Remark 1: Working Zone of CNP GW-RE0656-24



Remark 2: Advance Notification to EPD via online system

2024/6/17	上午Q:4

Mail - Lee Wan Chung, Leo - Outlook

[Acknowledgement] GW-RE0656-24 Yau Tsim Mong

Online Submission for Advance Notification of CNPs <admin@nco-emergencywork.hk> Fri 6/7/2024 9:05 AM

To:Lee Wan Chung, Leo <leo.lee@buildking.hk>

CAUTION: This email originated from outside of the company. DO NOT click links or open attachments unless you recognise the sender

Block sender

This email acknowledges your advance notification submitted at 07/06/2024 on 09:05. Information appended below:

CNP No. :	GW-RE0656-24	
Date and time of receiving notification :	07/06/2024 09:05:21	
Notification Ref :	GW-RE0656-24-001	
CNP holder :	Build King - SK ecoplant Joint Venture	
Location of Work :		
- District :	Yau Tsim Mong	
- Affected TPUs :	225	

Details of work:

Details Location of Work	Date & Time	Details of work program
Public Square Street near Prosperous Garden, Yan Ma Tei, Kowloon	22:00 End::	TTA Implementation 2. Construction Activities 3. Road Reinstatement

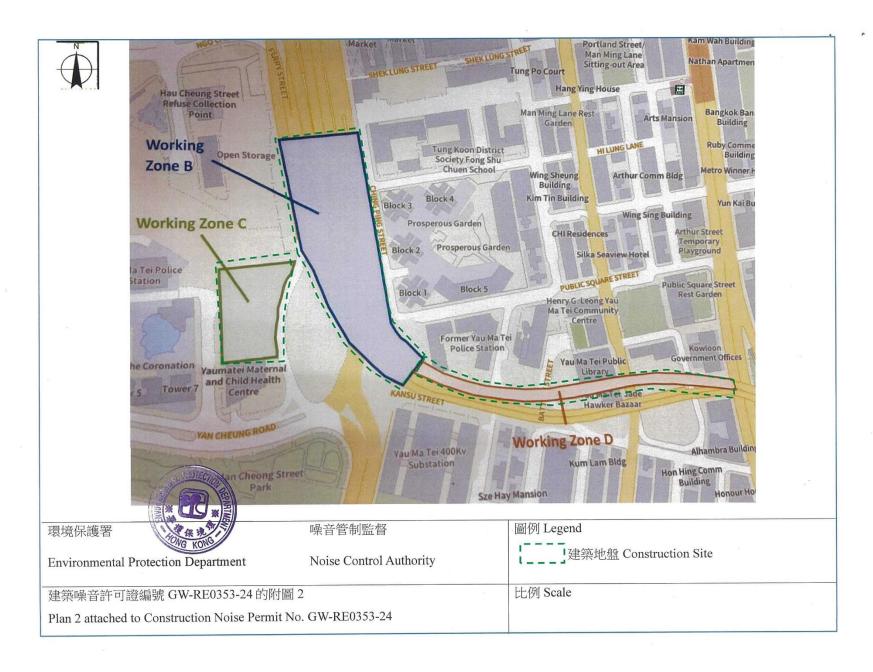
Company Details (Contact) :		
Name of company conducting the work :	Build King - SK ecoplant Joint Venture	
Name & title of responsible person :	Bosco Lee/ Construction Manager	
Fax number :		
Telephone number :	98363402	
Email :	leo.lee@buildking.hk	

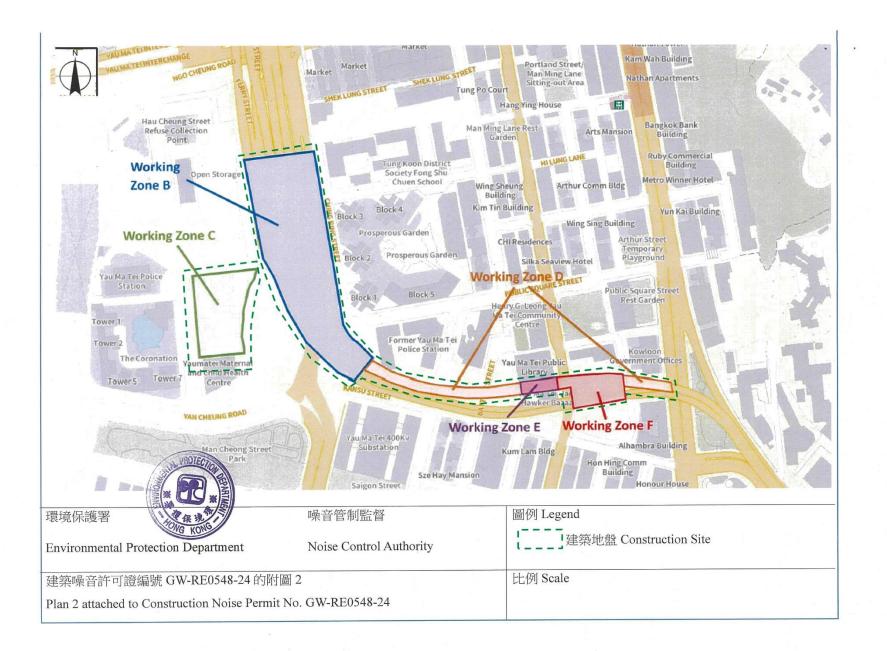
Interim Report on Environmental Complaint

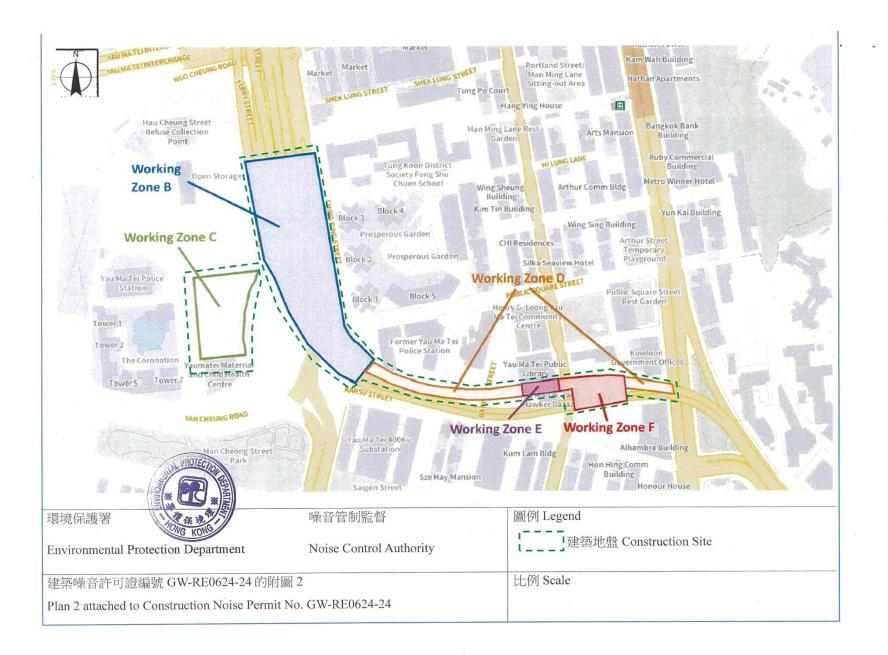
Project	Central Kowloon Route, Yau Ma Tei East Section			
Complaint Code	EC134-CKRYMTE20240625_001			
Complaint description	The complainant was received on 14 Jun 2024, about construction noise from the site			
	area near Hoi Yu House, Hoi Fu Court at 2330, starting from 6 May 2024.			
Parameter	Construction Noise			
Investigation finding	The complaint was received on 14 Jun 2024, about construction noise from the sit area near Hoi Yu House, Hoi Fu Court at 2330, starting from 6 May 2024.			
	According to contractor's information, for construction works undertaken within restricted hours, construction of noise enclosure at Ferry Street Flyover near Yau Ma Tei Catholic Primary School was performed every day except Sunday and general holidays from 6 May 2024 to 14 Jun 2024. The Contractor applied for valid Construction Noise Permits (CNP) (Permit No: GW-RE0353-24, GW-RE0548-24, GW-RE0624-24, GW-RE0696-24) which was granted from EPD, effective from 01 Apr 2024 to 30 Jun 2024, from 10 May 2024 to 30 Jun 2024, from 23 May 2024 to 31 Jul 2024, and from 14 Jun 2024 to 31 Jul 2024 respectively. The CNPs are with coverage of the construction site near the concerned area ¹ .			
	The maximum number of PMEs used included 4 welding machines, 1 generator, and 8 cherry pickers. The aforementioned PMEs were only operated in their respective Working Zone during the permitted hours listed on the CNPs. All idling PMEs were switched off as per requirement of the CNPs. The generator used was with Quality Powered Mechanical Equipment Label showing a Sound Power Level of ≤ 94 dB(A), as per requirement of the CNPs. The power generating part of cherry pickers were covered as noise mitigation measure ² . Advance Notification ³ has been made to EPD via the online system within 14 days but not less than 48 hours before commencement of work. No violation and non-compliance of CNP was observed or recorded. The Contractor had followed the requirements as stipulated in CNP.			
	Considering the fulfillment of stipulated requirements by the Contractor for EM&A manual, and the granted CNP, it is concluded that there was no non-compliance of the Project regarding noise quality impact from construction site.			
Actions taken / to be taken	The Contractor had followed EM&A Manual and the granted CNP strictly to implement mitigation measures in order to minimize nuisance to the public.			
	 In view of public concerns, the following additional remedial measures are taken: Carry out site inspection to ensure all PMEs are well-maintained and in proper function to avoid excessive noise; Provide training to workers of using PME carefully to minimize noise; Reschedule the operation time of the noisy equipment to less sensitive hours if possible; and The Contractor is reminded to consider the use of temporary movable noise barrier when feasible and applicable. 			
Remarks (Shown in next page)	 Working Zone of GW-RE0353-24, GW-RE0548-24, GW-RE0624-24, and GW-RE0696-24 Noise mitigation measure Example of Advance Notification to EPD via Online System 			
	5. Example of Advance Profitedion to EFD via Offilie System			

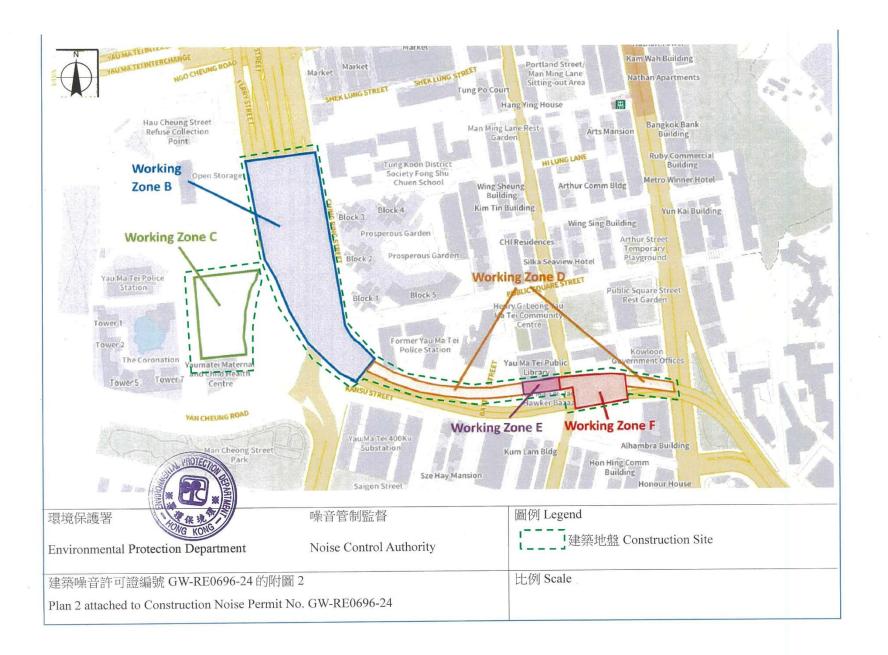
Date	02 July 20	24
Verified by IEC (ERM-Hong Kong, Limited)	Mandy To	Mandy 2.
Reviewed by ETL (Acuity Sustainability Consulting Limited)	Kevin Li	K;
Prepared by ET (Acuity Sustainability Consulting Limited)	Kako Ho	Ho

Remark 1: Working Zone of GW-RE0353-24, GW-RE0548-24, GW-RE0624-24, and GW-RE0696-24

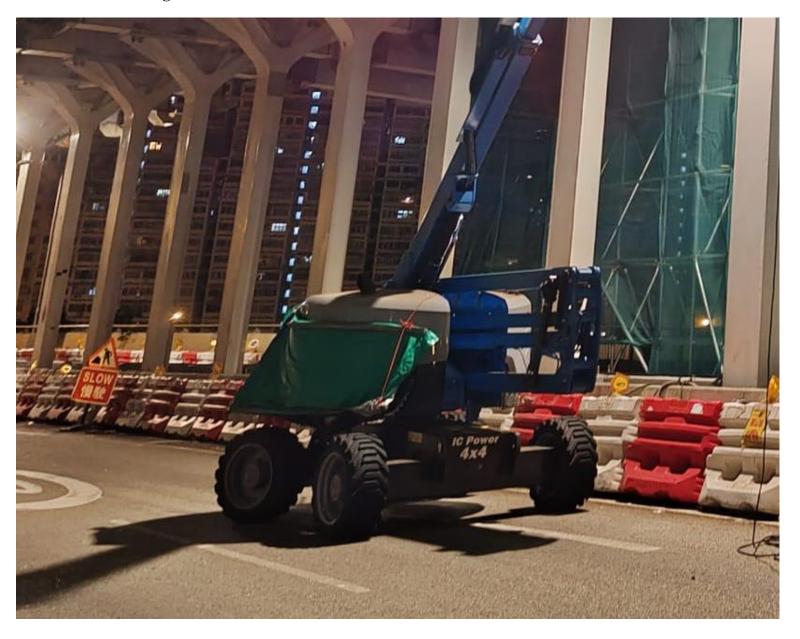








Remark 2: Noise mitigation measure



Remark 3: Example of Advance Notification to EPD via Online System

2024/7/2 上午10:23

Mail - Lee Wan Chung, Leo - Outlook

[Acknowledgement] GW-RE0624-24 Yau Tsim Mong

Online Submission for Advance Notification of CNPs <admin@nco-emergencywork.hk> Fri 5/31/2024 9:16 AM

To:Lee Wan Chung, Leo <leo.lee@buildking.hk>

CAUTION: This email originated from outside of the company. DO NOT click links or open attachments unless you recognise the sender

Block sender

This email acknowledges your advance notification submitted at 31/05/2024 on 09:16. Information appended below:

CNP No. :	GW-RE0624-24	
Date and time of receiving notification :	31/05/2024 09:16:28	
Notification Ref :	GW-RE0624-24-018	
CNP holder :	Build King - SK ecoplant Joint Venture	
Location of Work :		
- District :	Yau Tsim Mong	
- Affected TPUs :	221,225,226,228,229,252,253	

Details of work:

Details Location of Work	Date & Time	Details of work program
Road Sectionso of Ferry Street (from Waterloo Road to Kansu Street) to Road Sections of West Kowloon Corridor and Gascoigne Road Flyover (from Boundary Street to Wylie Road). Kolwoon	00:00 End:	TTA Implementation 2. Construction Activities 3. Road reinstatement

Company Details (Contact) :	
Name of company conducting the work :	Build King - SK ecoplant Joint Venture
Name & title of responsible person :	Bosco Lee/ Construction Manager
Fax number :	
Telephone number :	98363402
Email :	leo.lee@buildking.hk